DOCUMENT RESUME

ED 139 869 UD 016 996

AUTHOR Nelson, Hal; And Others
TITLE Southeast Alternatives: A Working Paper on Comparative School Culture Studies.
INSTITUTION Educational Services Group, Inc., Minneapolis, Minn.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Sep 75
CONTRACT 400-76-0005
NOTE 199p.; Some parts may be marginally legible due to print quality of original

EDRS PRICE MF-$0.83 HC-$10.03 Plus Postage.
DESCRIPTORS Alternative Schools; *Change Strategies; *Comparative Analysis; Decision Making; *Educational Alternatives; Educational Environment; *Elementary Education; *Experimental Schools; Instructional Programs; *Open Education; Parent Participation; Staff Role; Teacher Attitudes; Teacher Role; Traditional Schools
IDENTIFIERS *Minnesota (Minneapolis); Southeast Alternatives

ABSTRACT

This report contains three topic centered studies. Each provides a description of the similarities and differences between four elementary alternative schools: a free school, an open school, a continuous progress school, and a contemporary school. Dimensions of the instructional process provide a comparison of the four instructional programs in terms of use of space, proportions of time spent in different instructional activities, student groupings for instruction, and types of adult/student interactions. Teacher perceptions of alternatives provide a comparison of the teaching staff across the alternatives. Differences in background, experience and training are noted. Time demands, administrative expectations, and contracts with parents are contrasted. Comparative school culture focuses upon student rather than adult perceptions of each alternative. Similarities and differences in the instructional programs of the four elementary alternatives and a control school are discussed. School observation data, teachers study interview schedule, comparative school culture questionnaire, and the classroom observation form are included in the appendix. (Author/JP)

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SOUTHEAST ALTERNATIVES:

A

WORKING PAPER ON COMPARATIVE

SCHOOL CULTURE STUDIES

by

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A working paper submitted to the
National Institute of Education
pursuant to Contract No. 400-76-0005.

September 1975

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Title: Southeast Alternatives: A Working Paper on Comparative School Culture Studies

Source: Report submitted by the Minneapolis Evaluation Team (Educational Services Group, Inc.) to the National Institute of Education, Experimental Schools Program, pursuant to Contract No. 400-76-0005

As part of a larger evaluation of a system of alternative schools in Minneapolis--Southeast Alternatives--this report contains three topic-centered studies. Each provides a description of the similarities and differences among the four elementary alternatives (a free school, an open school, a continuous progress school and a contemporary school).

The first study--Dimensions of the Instructional Process by Frank Giannotta--provides a comparison of the four instructional programs in terms of use of space, proportions of time spent in different instructional activities, student groupings for instruction, adult and/or student initiation of activities and the types of adult/student interaction. Each school is described and a summary of similarities and differences is provided.

The second study--Teacher Perceptions of Alternatives by Margot Jenkins Pendergraft--provides a comparison of the teaching staff across the alternatives. Differences in background, experience and training are noted, as well as differences in teaching in each alternative. Time demands, administrative expectations, and contracts with parents are contrasted.

The third study--Comparative School Culture by Hal Nelson--focuses upon student rather than adult perceptions of each alternative. Using a cognitive mapping strategy, students generated and then responded to a listing of what kids, teachers and principals do in each alternative. Similarities and differences in the instructional programs of the four elementary alternatives and a "control" school are discussed.

(42 references)

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PART I: INTRODUCTION

A first visit to Southeast Alternatives' Open School resulted in the impression that the place resembled five "little red schoolhouses" under one roof. Although Southeast Alternatives has put together a distinctive combination of schooling models, a unique system of providing choice at many levels of educational delivery, and an unusual program for parent and community involvement, the question remains whether the project has invented anything new. SEA's experience is syncretic; it has tried new ideas and recreated new ideas from old ones. Choice is a concept, however, which implies difference. We need to know: (1) whether the alternatives provided SEA students are really different; (2) if they are different, how different; and (3) what is the nature of the differences which exist. A natural corollary to difference is, of course, similarity. We also need to know how alike the alternatives are, and what is the nature of their likeness. Answers to these questions presuppose systematic comparisons of the several school "cultures." The intent of this working paper is to provide data from three anthropological substudies which address formally the issues of difference and similarity in these cultural settings.

Conceptual Rationale

The need for a comparative study of school culture is well-grounded in both the SEA Experimental Schools Project and the anthropological approach undertaken thus far in the documentation of the SEA schools. Among SEA's

stated program goals, one of the most important has been the provision of alternative models of schooling in which students--and/or their parents--may choose to enroll. Choice among alternatives implies that the alternatives will be substantially different from one another, as well as from the mainstream of traditional schooling. The Minneapolis Advisory Task Force on Alternatives has provided the following set of five criteria to provide a city-accepted definition of alternatives.

> An educational alternative program in the Minneapolis Public Schools may be defined as follows:
>
> 1. A full comprehensive program (rather than a single class or part-time program offered within another program).
>
> 2. A program stylistically different and physically distinct from other programs.
>
> 3. A program available by choice to students, parents, teachers and administrators.
>
> 4. A program involving the community it serves (parents, students, teachers, administrators and others) in its decision-making and developmental processes:
>   a. in its initial planning stages;
>   b. in its implementation; and
>   c. in its evaluation.
>
> 5. A program that allows its students to move in a continuous manner from the elementary through the secondary level (Grades K-12), with continuity and consistency. (Minneapolis Advisory Task Force on Alternatives, Report to the Board of Education, April 1974).

Difference does not imply that the schools are dissimilar in all respects, but rather that they are distinctive in at least one major characteristic. The Executive Summary of the Minneapolis Evaluation Team's Ethnographic Studies (Nelson, et al., 1975), reveals that each of the five Southeast Alternatives Schools shares important characteristics with each of the

others, yet differs from each of the others in one or more substantial characteristic(s), such as student movement and progress, organization of primary instructional units, age-grading, presence or absence of a synthetic philosophy (or reflection of a philosophic movement), or social organization. It is this mix of similar and dissimilar characteristics which makes a systematic comparative approach a natural outcome of the primarily descriptive documentation found in the MET ethnographies.

The melange of similar and dissimilar characteristics of cultures, and what to do about it, is what provides an anthropological approach its distinctive flavor and its greatest methodological problems. Most anthropologists interpret cultural description (ethnography) and cultural comparison (ethnography) as inextricably linked phenomena:

> The ethnographer, once he returns from the field and is again firmly ensconced in his study, must do two things at once: he must set himself and his data into an expanding tradition of theory. In his latter role he is called an ethnologist, and ethnology is the comparative study of peoples from the ethnographies that have been produced about them. That the two processes are inseparable has led to some of the greatest misunderstandings and arguments in the entire profession (Bohannan, 1963:8).

The comparative study of cultures has long been the anthropologist's mainstay in generating a body of theory. The earliest synthetic works in the field used comparison as a basis for development of an evolutionary theory of human society (cf. L. H. Morgan's Systems of Consanguinity and Affinity in the Human Family, 1871). In 1889, E. B. Tylor proposed a method of correlating social and institutional variables cross-culturally; calling them "adhesions," his correlations formed the first systematic analytic comparisons between specific culture traits, and introduced quantitative

methods to the comparative study of culture. The comparative method became a major trend in British social anthropology. A. R. Radcliffe-Brown (1958:133) defined social anthropology as "the investigation of the nature of human society by the systematic comparison of societies of diverse types."

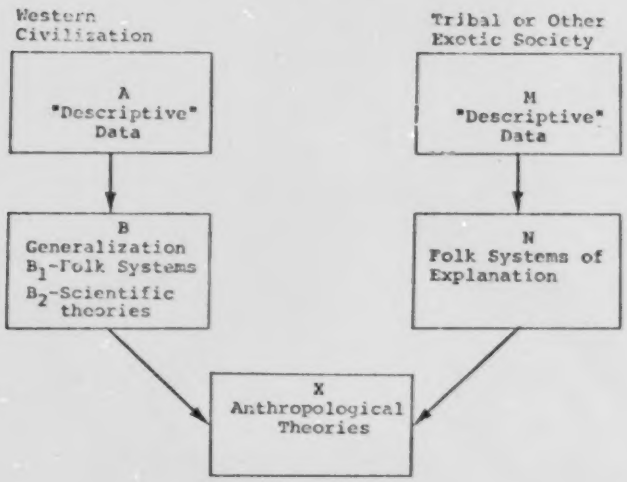
There have been a number of recent attempts to introduce greater rigor into the comparative method than was the case through the 1940's. One development is the quantitative correlational approach largely developed by G. P. Murdock (1949), Whiting and Child (1953), and the organizers of the Human Relations Area Files (cf. Moore, 1961). Another is the refinement of methods in social anthropology. S. F. Nadel (1951) argued that comparison is equivalent to experimentation in anthropological research: "comparison needs further refinement--planned selections and rigorous checks and controls--to approach the accuracy of a quasi-experimental method (Nadel, 1951:222)." Fred Eggan (1954) proposed the use of a method of controlled comparison in which ecological and/or historical variations are either known or slight (cf. also Eggan, 1955). A number of studies have since attempted elaborate controlled comparison studies. One which parallels the SEA design in many respects is J. B. Watson's New Guinea Microevolution Studies Project (1972-75) in which a multi-disciplinary team including five ethnographers conducted intensive comparative research on five linguistically-related New Guinea Highlands groups.

Comparison in anthropological studies implies examination of the same characteristics or social institutions in two or more discrete cultural entities. While many single-society ethnographic studies address comparisons to the difference between the culture researched and the ethnographer's own culture, the model presented by SEA involves several "school cultures" each

of which is a microcosm of the ethnographer's culture. Bohannan (1963;13) presents a model of "anthropological theorizing," using the former comparative set:

FIGURE 1

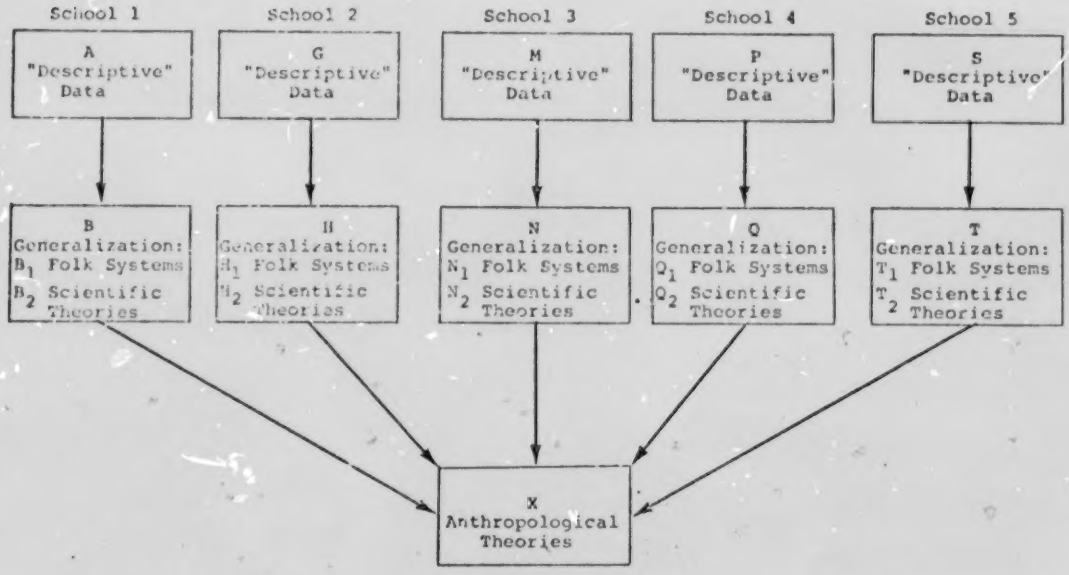
ANTHROPOLOGICAL THEORIZING



A comparable paradigm for the comparative study of school cultures, as in SEA, would start with a series of subcultural units (schools), each of which is the source of a body of ethnographic facts, and then generalize from both folk and "scientific" theoretical systems because both are found in such school cultures (see Figure 2). Such generalizations are then compared to produce broader theoretical generalizations about the nature of the differences and similarities among them--in this instance provided by educational alternatives. The descriptive data is provided by the school ethnographies, and a primitive attempt at generalization and comparison is provided in the Executive Summary. To continue the process of refinement and verification of preliminary hypotheses, a set of more systematic comparative studies has been carried out over the past year of the project.

FIGURE 2

ANTHROPOLOGICAL THEORIZING FROM COMPARATIVE SCHOOL RESEARCH


School 1
School 2
School 3
School 4
School 5
A "Descriptive" Data
G "Descriptive" Data
M "Descriptive" Data
P "Descriptive" Data
S "Descriptive" Data
B Generalization: B_1 Folk Systems B_2 Scientific Theories
H Generalization: H_1 Folk Systems H_2 Scientific Theories
N Generalization: N_1 Folk Systems N_2 Scientific Theories
Q Generalization: Q_1 Folk Systems Q_2 Scientific Theories
T Generalization: T_1 Folk Systems T_2 Scientific Theories
X Anthropological Theories

This report is comprised of three major sections, entitled a) Dimensions of the Instructional Process, b) Teacher Perceptions of Alternatives, and c) Comparative School Culture. Dimensions of the Instructional Process compares a defined set of attributes of instruction: space, time, activities, student movement, and initiation of activities, across schools. Teacher Perception of Alternatives deals with classroom teachers' satisfaction with, and feelings about, alternative education and their experiences in SEA. Comparative School Culture is concerned with cognitive and perceptual dimensions of key actors' (e.g., students, teachers, and principals) role functions and activities across school sites.

PART II: DIMENSIONS OF THE INSTRUCTIONAL PROCESS

A. Introduction

Since its inception in 1971, the Southeast Alternatives (SEA) project has sought to operationalize the intent implied in its name--to provide a system of alternative schools within a designated area of Minneapolis. A central premise of SEA has been that substantively differing learning environments could be created and maintained. Since the first year of the project, Southeast families have been offered a choice among four types of elementary programs. These have consisted of a (K-6) open school, a (K-6) continuous progress school, a (K-6) contemporary school, and a (K-12) free school. A (7-12) junior high/high school formed a second option beyond the sixth grade level. During the fourth year of SEA, (6-8) "transitional programs" were operating at the junior high level. These offered students open, continuous progress, or mainstream junior high experiences. A (9-12) open program is also being initiated at the high school level. Southeast families have been able to choose from among the various SEA alternatives and to initiate transfers of students among them at any time. SEA schools have also accepted students from outside the SEA attendance district. These non-SEA enrollments have been accomplished under guidelines set by a city-wide desegregation plan.

During the fourth year of SEA, a comparative study of its four elementary schools was conducted. The study's primary purpose was to isolate major

similarities and differences in instructional processes across the elementary options. A secondary purpose was to isolate major similarities and differences between the SEA system as a whole and non-alternative models of elementary schooling. The central question addressed by both of these purposes was: Are the SEA elementary schools indeed alternatives, relative to instructional processes exhibited within each of them.

Phrased in traditional psychometric terms, the study asked: Are the individual SEA "treatments" (i.e., the various schooling options) different? Phrased in cultural terms (the perspective employed in the study), this question translated into: What expectations for "appropriate" behavior would exist if a student attended each of the four SEA schools? Would such expectations differ? If so, how?

Some answers to the above questions have been provided in prior studies conducted by both the external (summative) and internal (formative) SEA evaluation teams. This work has been invaluable to the present study. It has provided vital contextual information on its concerns. However, because this work also usually served differing needs and audiences, its design and coverage generally proved far too varied for comparative analysis on issues of interest to our own study.

Also complicating the task of comparison were the allegedly differing purposes of the various "alternatives." One may justifiably ask, as several SEA participants have: What criteria can be used to meaningfully compare schools that are avowedly different in intents? Can such schools realistically be compared at all? Our investigation assumed that they can. It also assumed that comparisons had to be qualified with appropriate contextual data. At the

same time, we tried to bear in mind that an overemphasis upon qualifications could be just as dangerous and misleading as no qualifications at all.

The instructional process study was designed and conducted as a distinct unit and may be read as such. However, it was also intended as an appropriate complement to two companion studies of comparative school cultures. One of these related to teacher perspectives and the other to student perceptions. In contrast to the perceptual emphasis of these companion studies, the instructional process investigation focussed primarily upon operational, as opposed to cognitive, aspects of school culture. It asked the questions: What do kids and adults do during "school" in each elementary option? What cultural premises seem to underpin what kids and adults do at each school observed? Do such premises differ across schools? If so, how?

B. Objectives

In operationalizing so broad a concern as "instructional process," two major referents served as guidelines. The first, as previously noted, was the substantial body of data available in existing reports on the various SEA schools and the SEA project as a whole. Various sources cited in our study are listed among the references. The second referent, particularly useful in contrasting the SEA system with non-alternative schooling environments, consisted of existing research literature focussed on concerns similar to our own. The works of Jackson (1968), Lortie (1974), Dreeben (1974), Smith and Keith (1971), and Smith and Geoffrey (1968) were among the most useful. Based upon these two types of referents, the following dimensions of instructional process were isolated for investigation:

1) The arrangement and utilization of classroom and building space--or, what major differences, if any, are revealed in the arrangement and utilization of physical space across SEA schools?

2) The structuring and allocation of temporal sequences for daily instructional activities--or, are there differences in relative proportions of time segments devoted to differing types of activities?

3) The physical movement of students within classrooms, the school building, and beyond the confines of the school building--or, what major differences, if any, exist in patterns of students' movement within classroom and building space, as well as beyond the building?

4) The range and roles of adult contacts to which students are exposed--or, do substantial variations in student exposure to adults other than "teachers" exist among the schools?

5) The manner in which curricular activities are initiated by varieties of participants to the instructional process--or, how are instructional activities initiated relative to emphasis given to adult/child input?

6) SEA as a system of schooling--or, what feature of SEA elementary instructional environments appear to parallel similar environments studied in "mainstream" or "non-alternative" settings?

C. Methodology

As noted above, the central question of this investigation was cultural in nature: What expectations for appropriate behavior would exist if a student attended each of the four SEA schools? While such a question aims at communicating a quasi-"child's eye" view of the schools, a more realistic phrasing in terms of the methodology employed in the study is: What do kids and adults do, as observed by a "marginal native" like an adult ethnographer recording instructional processes on a daily basis? A critical intent of the study was not to solely document operational features of instructional environments,

but to externalize cultural premises which appeared to underpin, inform, and bring about those features. That is, it regarded operational features of instructional processes as essentially cultural artifacts.

I was fortunate in having "been around" SEA for almost two years when the study was initiated. One of those years had been spent as an ethnographer at the Open School. While this role occupied the bulk of my first year in the project, some opportunities for circulating among the other SEA schools had also presented themselves. Thus, by the second year I was not a complete stranger at the other schools. The tasks of gaining entree and rapport building were also facilitated by having on-site ethnographer colleagues at the various schools assist with preliminary arrangements, needed information, and initial introductions.

During the spring of the 1974-1975 academic year, one intermediate class (grade levels 4 through 6) was selected for study in each elementary school. Considerations in selecting classes were ease of researcher entry, intermediate student representation, and the instructional style of the teacher (i.e., as close to the "middle" of styles exhibited among the school's intermediate teachers, in the judgment of the author). The latter consideration, teachers' instructional styles, was an issue where contextual data was of help, in that some of the types and range of other styles can be pointed out to "balance" and lend perspective to reader's interpretations. In general, I felt that no teacher selected for study was particularly "atypical" of intermediate instruction in his/her building. This is not to say his or her style was totally identical with any other's. After having the purpose of the study explained, both teachers and students were generous in patience and cooperation at having an adult (pencil and pad in hand) go through some days in their midst.

Each class was observed for a total of nine hours. Nine hours served as a minimum and was used as the standard figure in analyses, though total observation time in each of the classes exceeded that figure. (The school-specific appendices contain listings of actual times each class was observed during the week.) The total time of observation in each class, expressed as a percentage of the total weekly time a class spent "at school," was approximately 30.3%--a little less than one-third.

While the initial intent was to observe each class over identical time segments during a "typical" week of school, this was not always possible; nor, because of certain considerations, could it have been particularly productive. It was not always possible because of time demands on the author. It would have been of no particular help because, as I quickly discovered, not every school's (or class's) schedule was alike. I found it useful to map out a class's weekly schedule in order to balance interpretation of the time periods actually observed. These schedules are also included in the school-specific appendices. In general, I was able to "cover" the major parts of the day and key kinds of activities in each class observed, even though daily coverage was not strictly identical. Observations were conducted from mid-April through the end of the school year on the schools in the following order: Open, Contemporary, Continuous Progress, and Free. Roughly two consecutive weeks were devoted to each.

While it was possible to observe a "class" at three schools (Open, Continuous Progress, and Contemporary), the Free School did not use "classes" as grouping structures. Rather, an advisor (adult)/advisee (student) system was used. I thus opted to "track" an advisee during the period I observed

at Free School. Even when members of the same advisee group, advisees did not have matching schedules.

A recording method was devised specifically for this study. It was the outgrowth of several pilot observation sessions which sought to come up with an effective, single, yet meaningful method of recording pertinent data. Existing instruments seemed to require more modification than seemed worthwhile to be sufficiently adapted to specific needs. A form was developed which grouped observations into the following six categories: start/end time; adults present; student grouping; student locations; activity content; and activity initiation (see Appendix A). Two major distinctions were made in the recording of time: (1) school routine time--e.g., lunch, recess, teacher-prep time, and (2) class routine time, or time whose use was determined mainly by the class within school routine guidelines--e.g., class clean-up, circle time, language arts. Observations at each school were standardized to reflect 70 minutes of school routine time and 470 minutes of class routine time. School routine time thus formed 13% of total time recorded; class routine time formed 87% of total time recorded. These compare with a class's approximately total weekly percentages of 23.5% school routine time and 76.5% class routine time--under "ideal" conditions.

The raw data was coded into ten minute time segments. Grouping data was generalized to the categories "uniform" or "varied." "Uniform" referred to the use of a single or overwhelmingly predominant (e.g., all except two students) mode of student grouping--e.g., single group, all students grouped into subgroups, or all students paired--during an observed time segment. "Varied" referred to simultaneous use of differing grouping modes--e.g., some

students working alone, some in pairs, some in groups, etc. Categories of adults present were also coded into teacher, aide, support staff (e.g., internal evaluator, social worker, counselor, community resource coordinator, curriculum specialist), volunteer, or visitor. Location was also coded into "uniform" or "varied." "Uniform" referred to a single or overwhelmingly predominant use of space by students--e.g., all sitting at desks, all sitting on floor. "Varied" referred to simultaneous use of more than one type of space--e.g., some walking around, some sitting, some at desks, etc. Activity initiation referred to those categories of persons who seemed to have primary influence in initiating the activity content observed over specific time segments. It was coded as either student alone, adult alone, or combination thereof. Activity content was coded in terms used either by the specific school (e.g., projects, story time) or in highly specific terms where no school-specific terms seemed to exist--e.g., solving crossword puzzles. This latter situation occurred most at Free School.

After data were coded, they were graphically represented in bar graph type form--one visual representation for each school. From this graph (presented as tables below in sections on each school) several analyses were computed. These analyses, expressed in percentages, paired the six major dimensions in a variety of combinations aimed at illuminating major types of emphasis within single dimensions or among paired dimensions.

Data of a narrative nature were also recorded during observation sessions--e.g., verbatim dialogue, observer's comments on points of interest, or additional information. These narrative data, combined with semi-structured informal conversations with students and the teacher, provided valuable additional perspectives.

D. Organization of Report

Each school is treated in three principal ways. First a section entitled "Contextual Remarks" summarizes pertinent background data on the school--particularly data relating to the six dimensions specifically isolated for attention. A second section, entitled "Data Analysis," presents results of several analyses performed on the observation data presented on the individual school in graphic form. Specific attention is devoted to exploring relationships among the six dimensions examined. A final section, entitled "Reflections," steps back from the operational data and externalizes cultural premises which appear to be reflected by such data. In this section, additional contextual material (e.g., narrative observations, existing research sources, additional observations) are also used to illustrate major points.

Following upon the four school-specific sections, a section is devoted to pulling together major similarities and differences among results. Dominant emphases among the schools are presented, as well as dominant similarities. A final section addresses the secondary purpose of the study--some major similarities and differences between SEA as a whole and non-alternative schools.

Before turning to presentation of the study's results, two methodological notes are in order. First, because the primary intent of the study was to obtain a perspective on school instructional environments <u>through</u> concentration upon <u>classroom</u> instructional processes, data on school routines has not been treated in the same manner as classroom observations. Because it was assumed that school routines would <u>not</u> vary as widely as classroom routines, these data were <u>not</u> included in the time segment coding along the study's six dimensions. As anticipated, school routines were found to be highly

similar across programs. However, these routines did provide invaluable information on school culture as a whole, particularly as such routines affected classroom routines. Thus, a treatment of these data are included in contextual and reflection sections on each school.

Secondly, the experiences of the author as a quasi-naive learner of the various school cultures also proved invaluable. Burnett (1974:25-26) has called for greater externalization in presentations of what she calls the "analog between culture acquisition and ethnographic method." Therefore, where it was felt this would constitute an appropriate and useful addition, selected "culture acquisition" experiences of the author have also been included.

E. Contemporary School

Contextual Remarks

The Contemporary School enrolled approximately 265 students during 1974-1975. As in the prior three years of the SEA project, enrollment reflected a relatively high proportion of blue collar families. Some 70% of the school's students represented the building's immediate attendance district, lending the Contemporary School a distinctively "neighborhood school" character.

In general, staff composition did not radically depart from that encountered in other public elementary schools. The principal, nine teachers, the clerk, several support staff and a number of aides were Minneapolis Public School (MPS) civil servants. Certain other staff were shared among SEA schools and paid out of federal monies. Still others were volunteers. The majority of staff were of upper Midwest origins and female (Nelson, 1975:54).

In keeping with its alleged "traditional school" image, the Contemporary School utilized age-graded self-contained classrooms as its primary mode of student grouping. Each class was under the charge of a teacher, assisted by other categories of paraprofessionals and support staff. Some "split" classes were also used--i.e., ones containing a mix of two age/grade levels.

The Contemporary School curriculum heavily emphasized mastery of basic skills--reading, mathematics, science, and social studies. Instruction in each of these subjects drew upon a variety of multi-media materials. The Addison-Wesley math series provided a corpus of sequenced objectives continually assessed through use of a computerized Comprehensive Achievement Monitoring (CAM) program. The Contemporary School building was the largest of the SEA elementary facilities. It housed a math center with computer teletype terminals used in drill and simulation activities. Holt Databank resources, complemented by varieties of MPS materials, were used in social studies. The Contemporary School also housed both SEA-wide and MPS-wide science and environmental studies centers, rich in curricular and living plant/animal resources.

Accenting the school's basic skills emphasis were several enrichment activities and programs--field trips, creative dance, industrial arts, and ceramics to mention a few. A particularly strong Contemporary School program was its Community School. This provided both students and adults (including senior citizens) choices among a broad range of after-school activities, crafts, and sports. Nelson (1975) provides a fuller treatment of the above and other aspects of the Contemporary School program.

Our study of instructional processes focussed upon a "split" intermediate class of 29 students. This group consisted of 17 fourth graders and 12 fifth graders; 15 boys and 14 girls. The six dimensions examined--time, space, activities, grouping, adults, and activity initiation--overlapped in some analyses. For clarity in presentation, all analyses are therefore discussed under three major headings: activities, grouping, and adults.

Data Analysis

Of the total class routine time observed (CRTO)--470 minutes--some 86% was taken up by four major types of "basic skills": reading (26.5%), social studies (21.2%), mathematics (19.1%), and spelling (19.1%). The names of these four subjects are those used by both teachers and students and were coded as such. In computing the percentages for each, only two changes were made. Reading was combined with "story" time and spelling was combined with a "writing" exercise. The remaining 13.8% of CRTO consisted of art or such logistical activities as moving out of the room to an extra-classroom activity; "getting set" or preparation for a following activity (e.g., getting seated at desks, getting paper out, etc.); clean-up; or dismissal.

About half the math time observed was devoted to taking CAM tests; the other half was consumed by workbook exercises. Most of the spelling time observed was also devoted to taking written tests, which were part of the curricular materials used. These were turned in to the teachers for correction. Social studies activities drew upon cultural-oriented curricular packets. One lesson was devoted to discussing the Yanomamo language, listening to a record of it, and discussing aspects of Yanomamo culture. Discussions were

in a question/answer format, with the teacher asking the class to volunteer information and opinions. Some worksheets were also distributed for completion. Reading was approached in a variety of ways. For some of the time observed, the teachers would read the class a story (a designated activity for part of the day). During other times observed, worksheets or textbook exercises were completed by the students.

A total of 79.8% of CRTO was devoted to activities of a uniform nature. That is, the entire class or overwhelming majority of the class were simultaneously engaged in the same activity. Some 20.2% of CRTO was varied in nature--with different activities pursued by differing combinations of students at the same times. Both uniform and varied activities overlapped with subjects and logistical type activities, although most subject time was covered in the uniform manner.

The bulk (92.6%) of CRTO reflected activities which were primarily adult initiated. The remaining CRTO reflected activities which were combined adult and student initiated. During the latter types of activities, students were usually afforded the option of engaging in one of two or more types of classroom activity focussed on a particular subject. An example would be a choice between writing a reading exercise, or identifying language problems in a story together with teacher.

Turning to students' use of space, 76.6% of CRTO represented uniform use of space. That is, all students were using the same type of space--e.g., all at desks, all on floor, all on line. Some 80.2% of CRTO devoted to subjects also reflected uniform space use. The principal--almost exclusive--mode of uniform space use was that of students seated at desks that were "theirs."

Desks were by no means restricted to fixed locations. For certain activities, they would be drawn up in a semi-circle or other arrangements. At other times, students would "inch" them around on their own!

All (100%) activities observed, where uniform space was employed, were adult initiated; 32% of all varied space use type activities were combined student and adult initiated. This does not mean that no solely student initiated activities were observed during the study. These did occur but they came about in two major ways. The first was during "recess" times--periods designated "recess" and taken either in class or out in the playground. Since these were school routine times, they were not included in data analysis. The second way was through periodic choices of non-classroom activities offered to students--e.g., attending woodshop once every six weeks or opting to participate in time segments of out of room activity options (e.g., creative dance) on certain days. These were also excluded from data analysis because they were extra-classroom in nature.

Grouping—All (100%) of activities observed, where uniform grouping was employed, were adult initiated. Uniform grouping made up 63.8% of CRTO. In addition, 29.4% of the 36.2% varied grouping time observed was almost the equivalent of uniform grouping since the "variation" consisted of a single pair of individuals. This pair consisted of the teacher helping one student, while the rest of the class worked on as a group.

Adults—The uniform tenor of grouping in general was also reflected when more than a single adult was present in the classroom. On some 89% of the occasions when more than one adult was in the classroom, the class worked as either a "single group" or "alone." "Single group" refers to a situation

where the class was able to share somewhat while being addressed by the teacher (e.g., as in a question-and-answer session). "Alone" refers to situations where silence and minimal sharing was expected (e.g., as in taking a math test).

For the majority (70.2%) of the CRTO, only one adult was present in the classroom--the teacher. For the remaining 30% of the time, more than one adult was present, usually an aide.

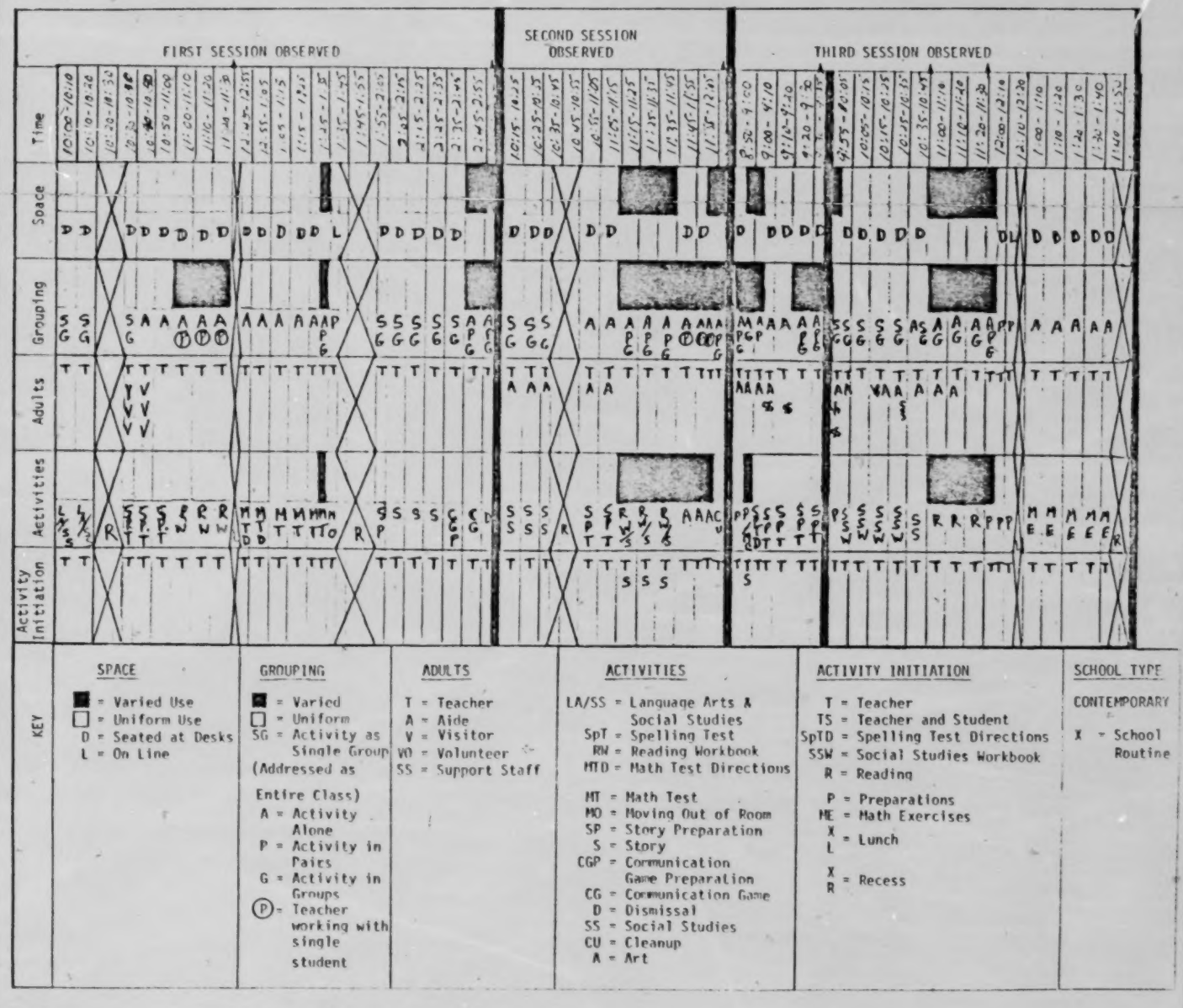
To summarize, the bulk of activities observed were uniform in nature and consisted of basic skills subjects. Most activities observed were teacher initiated. Grouping was primarily uniform, with the single group or alone structures most used. Students spent the majority of time observed seated at desks (uniform space use). A single adult--the teacher--was present in the room during the majority of the time observed. Figure 3 presents a graphic representation of the above summary in greater detail.

The time schedule followed by the class (see Appendix B) stressed basic skill mastery; as we have seen, the class generally adhered to it. Students seemed well aware that certain times were for certain activities; the teacher's pacing generally kept things moving as well. Certain cues were used to call the group to order. In addition to school bells, these consisted of either the teacher ringing a small hand bell or simply saying something like "OK, let's go." Students usually quickly comprehended and assumed their seats.

While both time and curricular activities appeared fairly consistent, it must be noted that neither was written in stone. Not all activities started and ended "on the nose"; not all curricular activities used "packaged" materials.

FIGURE 3

CONTEMPORARY SCHOOL
DATA SUMMARY



There were sometimes surprises (e.g., field trips) planned on short notice. The same held true of space utilization. Generally, as noted, recess provided a time to "stretch" and/or to simply relax. Students would play records, walk around, chat, and generally "unwind." Recess was usually a time eagerly embraced; another period that allowed some unwinding was gym. Some kids noted that they looked forward to the sheer exercise of running around (though grouping was usually uniform as well in gym).

During the periods observed, a notice was sent home requesting additional volunteer help for math. While the teacher was observed to have to deal with quite a number of other adults, the primary job of instruction fell upon her. For example, the aide generally corrected paper or prepared materials. Some support staff or volunteers handled individual tutoring needs. But, in general, direct instruction seemed the teacher's job, as did primary responsibility for the class. In the morning, the teacher took attendance and reviewed the day's upcoming schedule. During recess, she usually gave the class the option of staying in the room or going outside on the playground--unless she happened to be on "playground duty." Then all had to accompany her. Also during the period observed, an innovation in adult-student relationships was being tried. Every adult in the school, including maintenance people, was being assigned a group of students to give students an adult other than their teacher with whom to relate. Periodic meetings were being set up for this activity.

Modes of address employed with teachers were always observed to be formal--e.g., Mrs._____ or Miss_____. However, though relationships seemed well defined in terms of adult-student status, they seemed far from cold. In one session I was able to witness a group of students present their aide with a

quilt they had made for her; during another, "warm fuzzy-grams" were dispatched to thank a volunteer. A number of the students also appeared to have known one another for several years--a results of the Contemporary School's "neighborhood school" character.

To summarize, both students and teacher seemed well-tuned to the class routine, almost task oriented in the sense of jointly going about a job that all seemed to sense simply had to be done.

Reflections

Activities—One cultural assumption made at Contemporary School was that there was a corpus of knowledge that ought to be learned at certain times in a student's life. Item: "If you waste your 5th grade year, don't expect to work on it in the 6th grade. Spelling is something you need to work on and you know it!" Another was that this knowledge corpus could be successfully taught as an identifiable series of knowledge blocks called "subjects." Still another assumption related to the mode in which subjects are taught--generally from discrete materials such as textbooks, workbooks, worksheets, media kits tackled simultaneously by the class for certain periods of time. The "long arm" of constant monitoring through objectives-referenced tests are also seen as aides to both students and teachers in identifying learning needs.

Time—Closely related to assumptions about activities are certain corollaries which relate to time. One such corollary is that there are class times allocated for certain activities that simply have to be done. Item: "You've done a tremendous job this morning. Just hang in there. We've only got a few more minutes." A related assumption is the occasional

arbitrariness of time: Item: "This is as far as we got today. Close your books." Yet: "Kids, we're not going to go by the clock. We're going to finish the social studies lesson even if it runs through the break." Because certain work must be covered by all during certain times, those who miss work must "make it up." Item: "Will kids who went to band please sign up for make-ups?" Or: "I'd go to that activity, but you have to make up work you miss while you're at it."...Also, when all work on the same work at the same time, waiting is something one must learn to live with. Item: "If you're finished, re-check your papers." Or: "If I let you interrupt, then I have to give other kids the same privilege; and I don't think we'll get far that way. You're fulfilling your needs but not letting the rest of us do so." Partly because one only has so much time to complete them in, tests are important. Tests are not something one does with one's neighbor. Item: "Barricades" were erected by some students at desks next to each other so the other student "wouldn't see." It is also critical that silence be maintained during tests and often during test-like work. Item: "You may go ahead as soon as you get your tests...It's absolutely necessary we have it quiet. In this room, you will <u>have</u> to be quiet." Or: "We don't have any time to wait for people to stop talking."

<u>Space</u>—As a student at Contemporary School, one has a desk. One can put his or her things in that desk. During class, one is usually expected to stay seated at it, unless the class has an activity which lets one out of it--recess, gym, listening to a story on the floor. Sometimes, one can get out if one goes up to the teacher (along with several others) and asks her questions. However, she doesn't always approve of students' doing this, especially if she's working with a student who's "turn" it is for individual tutorial work that day. Item: "Kids, I don't want you to come up to me... Your assignment is to do

that page and my assignment is to work with Betty. Some people are keeping me from doing my assignment." Sometimes the teacher will call out the names of students who are out of their seats when they are not supposed to be. Lunch is one of the times one gets out of desks. Item: "OK, line up to go down to lunch."

Grouping—When in a "whole class" group, as is often the case, one must learn to wait one's turn. Item: "We can't do anything together unless we learn to take turns." A key assumption is that things often need to be done together. Item: "Sit down, the last thing we need is a big rush of people here. One at a time." While the teacher did try to make some materials more "individualized" so kids could move more at their own speeds, a basic assumption reflected was that such materials were appropriate for use with the whole group. The class needs to be "together" to start many activities. Item: "We have kids coming in now from three different activities and we are not together at all. I don't think we're ready to start yet."

Adults—Teachers experience interruptions by other adults as well. Sometimes a volunteer pops in; sometimes another teacher comes to ask a question; sometimes the band teacher calls some students out. The teacher is the one to ask if one wants to leave the room; get some paper; needs some directions; wants some papers corrected; wants to sign up for activities; wants to do something else. The teacher is also the person other adults seem to think should be asked if they want something.

Activity Initiation—In general, the data tended to point to an assumption of primarily adult responsibility for initiating learning activities. Student input was seen to come in the form of exercising choices among both short- and

long-term options. Short-term options were illustrated by students' choice between going over a story with the teacher in a small group or sitting at their desks to do a written exercise. Long-term choices were illustrated by "rotating" (among classrooms) options--e.g., choosing to attend workshops when the class's turn came up once every six weeks.

F. Continuous Progress School

Contextual Remarks

The Continuous Progress School enrolled approximately 400 students during 1974-1975. The heavy enrollment reflected the merger of primary (K-3) and intermediate (4-6) program components which had operated in previously separate buildings over the first three years of SEA. Continuous Progress School families represented a mixture of white middle class and minority (Black and Indian) subcultures.

Staff composition reflected a mixture of certified MPS employees, some personnel whose services were separately contracted for, and community volunteers. In the first category, less so in the second, individuals whose services were "SEA-wide" could be found (e.g., the social worker). The first category included, but was not limited to, the school's principal, clerical and maintenance staff, curriculum coordinator, thirteen classroom teachers, some eight aides (eventually one to each room during latter part of the year), and certain support staff (e.g., full time counselor, part time nurse, social worker, speech specialist, etc.). The second category similarly included certain enrichment program staff, as well as community education and volunteer program coordinators. The final category included

volunteers who functioned in a variety of capacities both within and outside of classrooms.

The Continuous Progress School was structured into two major ungraded K-6 units. One of these, Unit I, primarily occupied the first floor of the building, with Unit II located on the second. Each unit consisted of a team of teachers, called Team I and Team II. While the types of classroom activities were similar in each unit, their basic schedules differed in order to make most efficient use of building space, resources, and time. Classroom teachers were mostly female. For example, Team I consisted of 6 females and 1 male; Team II included 5 females and 1 male.

Like the Contemporary School, the Continuous Progress School placed emphasis upon basic skills mastery--reading, language arts activities, mathematics, social studies, and science. The April 1975 issue of Southeast Alternatives described the relationship between room assignments and reading achievement in one of the units as follows:

> Children are assigned to homerooms according to reading achievement. Following the American Book Company reading curriculum, each unit has children at all 13 levels (A-L plus Contracts). With six teachers and usually four reading groups in each room, the "average" situation would be to have "F" reading, for example, taught in two rooms per unit. But since the reading achievements of 220 children won't follow a tidy mathematical pattern, sometimes there may be enough "F" readers for only one group, yet enough "H" readers for three groups. Many other reading materials are used for supplemental activities, enrichment and independently contracted assignments.

Equally particularized was the Continuous Progress School's Individualized Mathematics System (IMS) curriculum, which was divided into 11 topics (e.g.,

numeration to geometry) with each topic further subdivided into 9 levels of difficulty. Seven major instructional modes were used in the IMS (e.g., students' writing prescriptions, correcting their skill folders, concrete materials, etc.). Placement tests were used for both the reading and math curricula described.

Physical building space was accommodated to both math and reading curricula. For example, an IMS math center was attended by students a minimum of three days a week. On the other two days, math was covered in homerooms. A "Castle Room" housed the basic language arts materials.

Structured around the basic skills emphases were a variety of additional activities. Some of these were aimed at relating to the basic skills instruction. Perhaps the biggest additional activity were the Continuous Progress School's Interest Groups. These were generated from lists of topics sent home to families of all students and offered two-week periods of 45 minutes a day (except Tuesdays). Sample Unit I Interest Group offerings for the period observed included language arts (e.g., cursive writing); science (e.g., optics); art (e.g., photography); music (e.g., chorus); or independent study. Sample Unit II Interest Group offerings included art (line and design); language arts (stories); science (beginning electricity); math; industrial arts (woodworking); and independent study. Students selected a topic which interested them; if no selection was made, they were assigned to an interest group for the two week period. The Interest Groups were taught by varieties of adults (teachers, volunteers, etc.). A Free Choice hour also occurred once every two weeks and was similar to the Interest Group in basic structure. Rooms rotated in "tally

order" which enabled each room to get a chance at "first choice" among Interest Group sessions.

In addition to Interest Groups, which utilized varieties of school space, other non-classroom types activities/spaces included a media center (library) and gym, usual in MPS schools, and an art room called Heartland, unique to Continuous Progress School, staffed by an art teacher. Field trips and use of hall space for instructional purposes by some rooms added to ways physical space was used for various activities. Students' days normally began with homeroom meetings for informational, planning, and/or problem solving purposes. They usually ended in the homeroom as well for "wrap-up" activities. Between the "kickoff" and "wrap-up" times, students moved (both physically and cognitively) through two major activity blocks--basic skills and interest groups, accented by additional activities of the sort mentioned above. Again any summary necessarily omits much. French and Reynolds (1975) provides an analysis of the Continuous Progress School program in general, as well as many of the specific areas mentioned above.

Our own investigation focussed upon a Unit II class of 29 students which spanned four "grade levels" in the traditional sense. These consisted of 3 third graders, 6 fourth graders, 14 fifth graders, and 6 sixth graders. Though the term "grade" was not used at Pratt, students generally responded quickly when asked about it and knew what was meant! The group consisted of 17 boys and 12 girls.

Before turning to data analysis, a note is necessary on data coding for Interest Groups periods observed. Since the homeroom class physically dispersed to a variety of other activities during Interest Group time,

it was impossible for me to observe the "whole class." Instead, I opted to do a quick check on a small sample of students and return to the homeroom for the duration of the Interest Group. As events turned out, there was no real problem with the categories for which I had anticipated experiencing particular coding difficulties--namely grouping and space. In all cases, these were coded as "varied" (and checked out as such). The category "adults" was coded, only as it applied to the Interest Group observed in the homeroom.

Data Analysis

Activities—While there was a descending order of magnitude to time segments devoted to differing activities, the absolute magnitude of each segment did not reveal any variation exceeding 25% when compared against any other segment. Five main segments consumed total class routine time observed (470 minutes): subjects (32.9%); feelings and behavior (24.4%); interest groups (17%); logistics of movement, preparations, or recess-type activities (17%) such as breakfast (i.e., a breakfast snack served in the classroom). Types of basic skills subjects observed encompassed language arts activities, social studies, and mathematics. Language arts included, for example, "sentence-dictation," which entailed actual dictation as well as the grammatical analysis of sentences. Social studies activities observed included a guest speaker's film and lecture on African culture. Mathematics instruction observed included a lesson in "practical math," during which the teacher distributed packets of various candies and asked students to compute their prices.

The category coded as "feelings and behavior" refers to two major types of observed activity. The first consisted of a discussion between class and teacher of appropriate student behavior, as well as an actual disciplinary action administered to the class by the teacher. The second type of activity in this category consisted of use of a television series, designed to increase students' awareness of and analytical skills related to interpersonal relations. After watching the program, a worksheet on it was distributed to the class (see Appendix C) and a discussion of certain of its themes was held.

The next two categories, interest groups and logistics, represented 34% of CRTO between them (17% each). Both also entailed a considerable amount of movement on the part of the students.

The final category, "art and drama," was represented entirely by either student teachers or volunteers from the community. More accurately, the drama component might be represented as the class providing an opportunity for practice teaching to two student teachers from a local university--the activity consisted of the student teachers actually assuming charge of the class for a period of impromptu "plays" created on the spot by the class. The class was also given an assignment ("draw a figure of a person...") to be completed later in the day. The art component observed was also the work of local community resources--students from SEA's Marshall University High School. The students displayed a film on a then-current exhibition at the Walker Art Center. The students were involved in an Urban Arts program, which involved contacts with schools. Both art and drama activities had been arranged through the community resource coordinator at the Continuous Progress School. (The social studies speaker was a personal friend of the teacher and invited by her.)

Almost three quarters (68.1%) of CRTO represented activities which were uniform in nature, with either the total or an overwhelming majority of the class engaged in the same activity at the same time. Slightly over three-fourths (76.6%) of CRTO represented adult initiated activities. The remaining 23.5% of CRTO represented activities initiated through combined adult and student input, with some elements of student choice. All (100%) uniform activities observed were adult initiated.

Again, as was the case with the Contemporary School program, the fact that no solely student initiated activities were observed during our study does not, and should not be taken to, mean that none existed at the Continuous Progress School. Indeed, the author did observe some, but not during the course of the study time coded. However, the distributions of activity initiation indicated in the above results should serve to give the reader some idea of relative emphases observed. (A methodological note on coding is also in order here. The mere fact that some element of student choice existed, as in such activities as Interest Groups, was not in itself considered sufficient to code as "solely student initiated." What was considered crucial was the initiation source of an activity's actual content, combined with the element of choice.)

Over half (59.6%) of CRTO represented uniform space use. The bulk of this time consisted of situations where students were seated at six to seven tables spread around the classroom (see Appendix C). For certain activities, such as films, the tables were pushed back and the students all seated in only chairs. Some 70.9% of total subject time observed represented uniform space use, with 86.9% of the behavior/feelings time similarly represented.

Almost all (96.4%) of total uniform space use activities observed reflected adult initiated activities. Over half (52.6%) of varied space use activities observed consisted of joint adult and student initiated activities.

Grouping—Some 65% of CRTO represented situations where uniform grouping was employed. Although the class was distributed into a number of groups seated at the various tables, uniform grouping was nevertheless usually of the "single group" (i.e., addressed as entire class) or expected to work "alone" types. That is, sometimes the class was expected to jointly attend to the adults or media addressing them (single group). At other times, individuals were expected to work "by oneself"--minimal talking and/or sharing. Almost three-fourths (74%) of total subject time observed mirrored uniform grouping, with 100% of the feelings/behavior time similarly represented. All (100%) of total uniform grouping situations observed reflected adult initiated activities, though not all adult initiated activities were of the uniform grouping type.

Adults—The concentration of adults in the room during CRTO was heavy. During 96% of CRTO, more than one adult was in the room. For 57% of CRTO, more than two adults were present; for 25% of CRTO, more than three adults. For 3% of CRTO, only the teacher was in the room. On some 68% of the occasions when more than one adult was in the classroom, uniform grouping modes were employed.

To summarize, the majority of CRTO consisted of activities which were uniform in nature. These activities included instruction in basic skills subjects (highest frequency), as well as time devoted to four other categories: feelings and behavior; interest groups, logistics of activity

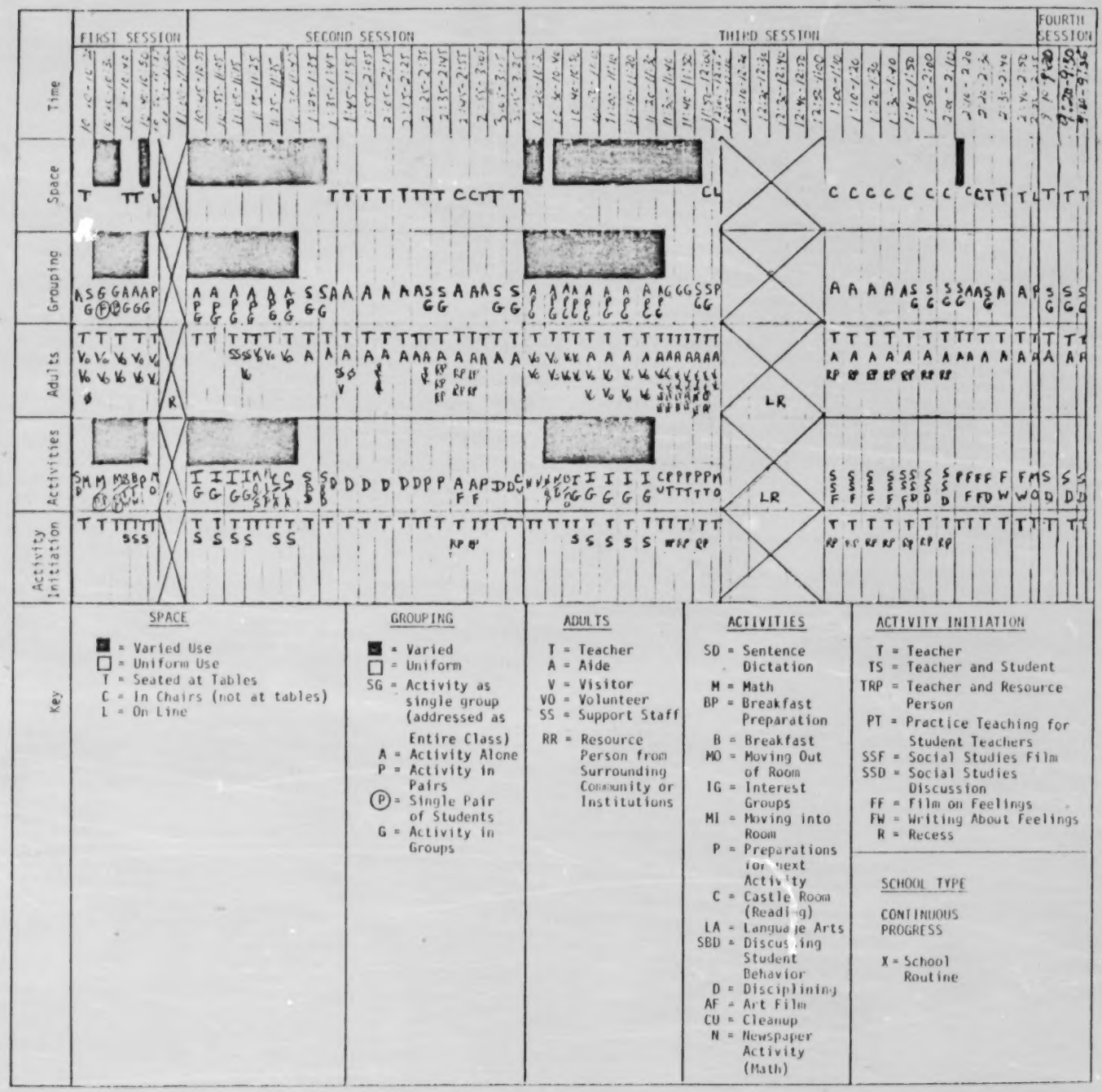
preparation and transition; and accommodation of student teachers in art and drama. Most activities observed were adult initiated. Grouping was primarily uniform, with the single group or alone structures most used. Students spent the bulk of in-classroom time observed seated at tables or in chairs (uniform space use). However, almost one-fifth of CRTO was marked by a good deal of student movement between locations and activities. During the majority of the time observed, more than one adult was present in the room. Figure 4 presents greater details on the above summary.

Students appeared attuned to the basic schedule of the class (see Appendix C), able to "rattle it off" to me when asked. I myself was rarely disappointed when arriving at the school. Though I could not be as confident as at the Contemporary School, I usually found the class doing what they "should be" according to their weekly schedule. I should note, however, that the weekly schedule was just that--weekly. Usually the overall structure of time into basic skills and interest groups remained the same; it had to if 400 students were to be accommodated. However, the specific content of certain blocks in that structure could be planned on a weekly basis by the teacher (e.g., "practical math" for the in-classroom basic skills block on morning "x").

I observed a variety of means used to demarcate time periods and activities. In addition to school bells, the teacher would sometimes announce, for example: "Castle Time, who's signed up for that?" In calling the class to order, certain cues were used. At times, the teacher would hold up her hand. At other times, the class itself would start counting. "One-Two-Three..." until all were silently in their seats.

FIGURE 4

CONTINUOUS PROGRESS SCHOOL
DATA SUMMARY



The close inter-relationship among time, space, and activities in the Continuous Progress School cannot be overemphasized. Partly because of heavy enrollments, partly because of an attempt to efficiently use available space, partly because of the individualized nature of the program, and partly because of the multiple goals being attempted (e.g., basic skills, interest groups)--the Continuous Progress School was almost constantly "on the move." Halls were rarely empty. They were usually "fair game" as instructional space, in addition to serving as thoroughfares for a considerable stream of traffic headed in several directions. Further, one need only consider the fact that "homerooms" became other students' "classrooms" at designated times. Teachers had to be acutely aware of this, as they "moved on" through a lesson. A time came each day when their room would soon be emptying out and re-filling with new faces.

Most students seemed to look forward to recess and gym. For though they were afforded opportunities to "move" at other times (e.g., interest groups, castle time, math times), they seemed ready for the more athletic activities after extended periods of their scheduled work. For others, the constant movement of the daily routine seemed to take its toll. During one interest group I observed, one of the students in the classroom to be vacated refused to leave. The school counselor was called in to discuss his refusal with him.

Students were usually under the supervision of at least one, if not more, adults. This supervision included time spent on the playground or lunch periods. Adults were usually addressed as Miss_____ or Mr._____. Within class, as noted, students were usually seated at six round tables.

Tables were numbered and often addressed by number. For example, during breakfast periods, the two students who prepared the beverages would call the tables for their turns to come up and get their food: "Table VI first; after you, Table III." Each student knew his/her assigned table, often going to seats in the same "spots" at the table. In contrast to the Contemporary School, students did not have a personal turf called a desk. Lockers in the hall were used to store personal belongings, as no cloakroom was available in the room.

We saw a great number of adults entering students' days and activities. Yet, it was clear that primary responsibility for the class fell upon the teacher. It was she who called the group to order in the morning, took attendance, discussed lesson plans for the day, checked to see if assignments to math, reading, and other groups for the day were correct, and generally acted as a transmitter of information from other sources to students. It was also she who supervised and coordinated the work of other adults who entered the room--student teachers, volunteers, aides. The bulk of tasks observed being performed by volunteers and aides related to correcting papers; collating and preparing materials for distribution to students; circulating about the room to give individual students requesting it some help; or simply getting the students lined up, out the door, and sometimes down the hall to another activity quietly as a group. Excepting the community resources, most direct instruction observed--adult to class as a group--was conducted by the teacher, rather than aide or volunteer.

While the school routine seemed to almost press the teacher into one role as "matching and movement" coordinator, certainly other roles co-existed

alongside that. Students were called individually by their first names and identified themselves as "being in" their teacher's "room." While some had "had" the teacher last year, many were totally new--both to the room and each other. Problems of interpersonal behavior within the class were regarded by the teacher as group problems, to be worked out within the group. Despite the daily dispersion through the building, a definite identity as a class existed.

Reflections

Activities—As at the Contemporary School, the Continuous Progress School seemed to share the assumption that there were certain kinds of knowledge appropriate for students to master. Part of this knowledge included the basic skills, organized into discrete subjects such as reading, mathematics, social studies, and the like. Item: "Now, if you're watching, you can learn your long division so when you do it in your IMS, it won't be so hard." Some subjects were refined into subskills--e.g., the topics of IMS math. Students' response to one question by the teacher on "what we need to know" included "spelling, handwriting, punctuation, and parts of speech."

Not all skill learning need be restricted to formal classroom or material-referenced instruction. The Interest Groups could hopefully "integrate" the basic skills by providing practical opportunities to see them in action or use them. In any case, a key Continuous Progress School assumption was that all students need not be working through the same materials at the same time, particularly with such systems as the IMS math. Classroom sessions observed did not always correspond to the above assumption.

Another key Continuous Progress School assumption was that multiple-goals should be operationalized in attempts to satisfy the multiple needs and interests of students. Thus, the Interest Group program formed such a considerable part of the program. Related to such an assumption was a belief that kids could and should feel good about themselves and school. A definite stress on how kids were "feeling" or "feeling about" things was observed. This assumption was nevertheless paralleled by another, also shared with the Contemporary School program. This was the need for constant supervision and monitoring, with some of the responsibility for this placed upon the student. Both the IMS and reading programs kept detailed "track" of where students were or were heading. We saw how such information influenced initial student grouping into homeroom assignments.

Time—Both students and adults (teacher, aide, volunteers) seemed acutely keyed into time awareness. Again, this could sometimes appear rather arbitrary from students' perspectives, despite the adult importance attached to it. Item: "We're going to sit. If we have to sit until 3:30, we will!" In a situation where certain times (e.g., gym or recess) were denied, students too were observed to appear acutely aware and keyed into time.

Space—Time assumed additional importance in a program that ultimately depended upon detailed planning, coordination, and dovetailing of multiple groups and activities in a single building, with so many hours available a day. Two teams of teachers or units of students had to master the intricacies of cooperation through being where one ought to be at the "right" time. While the Continuous Progress School was literally often "on the move," I was always somewhat amazed at how smoothly it appeared to work. During some

sessions observed, the "band kids" would pop in, get their instruments, pop out, and return later. Others might have begun leaving for interest groups, or the castle or math rooms, and so on.

Perhaps the importance of efficient logistics was one reason for the emphasis observed regarding another cultural assumption: kids ought to get in line before going to lunch, recess, etc., and stay in that line till there. Item: "OK. It's time for people done with language arts to come and line up. Is your name on the board? OK, leave." The emphasis placed upon students' being seated in groups at their tables was perhaps also related to the critical role played by logistics. I should note that the tables in the room observed replaced individual student desks early in the year. Later on in the year, a large wooden "cube" was added, in which and on which students could sit during certain activities. In general, however, the classroom space expectation seemed to be for students to be table-bound, unless requested otherwise. Opportunities to break from them included certain circle meetings (conducted on the floor of the hall) or, as we saw, films or breakfast.

Grouping—The Continuous Progress School use of ungraded class groups was naturally tied to a cross-age grouping model. While school literature occasionally promoted the cross-age teaching opportunities that might accompany this model, rather little of that was observed during inclass phases of the study. What was observed, relative to inclassroom grouping, was an emphasis on uniform grouping--i.e., one mode of grouping for certain activities. The principal modes observed were those of single class (entire class) or alone types. This struck me as somewhat odd, in light of the

physical proximity of students at the same table. Despite the individualized push of the Continuous Progress School program in general, the class observed appeared to do much as a group. During several recess periods observed, the class chose up sides and played kickball with one of the volunteers. Item: "If you'd sit down, I think we can do it (i.e., choose up sides) better." Or: "I'm waiting for you to be quiet and all to be at your tables."

It should be remembered, however, that the Continuous Progress School programs in math and reading exposed students to a variety of peers of other ages and other classrooms.

Adults—I was impressed by the number and kinds of adults with whom students came in contact in their classroom alone. However, adult roles appeared clearly defined with the teacher at the center of responsibility. The students seemed well aware of role differences. Students were expected to "clear" things generally with some adult, most often with the teacher. In addition to fulfilling a role of traffic and activity manager, the teacher also seemed to be the principal stocker, supplier, and dispenser of materials for in-class work: paper, sometimes pencils, worksheets, newspapers, and the like.

Expectations for appropriate student behavior seemed clear and were repeatedly clarified. Item: "Anyone who can't walk through the hall without talking, stays in the room!" Or: "I think it'd really be a feather in your cap if you could learn to just sit, without having all this motion." Learning to take one's turn was considered equally critical. Item: "One person is going to talk, raise your hand!" A final expectation was for students to be generally "happy" and "feel good about" school, as

noted above. Indications to the contrary usually led to attempts through group discussion to "get problems out into the open."

Activity Initiation—Generally, certain activities (such as interest groups) were initiated through both adult and student input. Others reflected student assignments to certain tasks by various categories of adults who crossed their paths. During one classroom situation, where a departure from the schedule came up, one student asked the teacher: "What do we do now?"

This does not mean that student initiation within activities did not exist (e.g., making what one pleased in pottery). It is to say that the content of most activities observed reflected primarily adult or combined adult/student input.

G. Open School

Contextual Remarks

The Open School enrolled approximately 335 students during 1974-1975. Enrollments have increasingly reflected non-SEA families. The Open School had among the higher proportions of these in comparison to the other elementary programs. During the fourth year of SEA, a proportionally greater number of primary-aged students (particularly 5-year olds) was reflected in enrollments.

Marcy staff, like the two schools previously described, was composed of three major categories--MPS certified employees, SEA-wide and Open School-specific contract staff, and volunteers. The first category included 10 classroom teachers (6 primary, 4 intermediate) as well as two special education

teachers. Others in this category included the principal; clerical, maintenance, and health staff; social worker; aides; curriculum specialists; counselor; librarian; and physical education teacher. The second category included two internal evaluators; a community resource coordinator; industrial arts and pottery teacher; some aides; and a community day developer. Some individuals in category one (e.g., curriculum specialists, social worker) were SEA-wide in assignment. The final category included varieties of individuals--parents, students, student-teachers--who performed a wide range of functions (e.g., field trip accompaniment, tutoring, teaching of mini-courses).

The program stressed the structuring of instruction around children's interests as a primary goal. Basic skills such as language arts and math formed part of the Open School program, but were not necessarily taught only as separate "subjects." Varieties of projects and activities were used as vehicles for also acquiring such skills. "Process as content" and "problem solving" approaches were also stressed. Student affect concerning peers and school, as well as the use of the community as a learning resource, were two additional program goals.

The Open School was organized into paired classrooms called "families." Each "family" was a unit of two or four classrooms including connecting hall space. Age spans within each room generally reflected a three-year spread. No "grade" designations were used, though students invariably seemed to know their equivalent grade levels when asked.

The Open School was housed in a relatively old building, refurbished to suit program needs at the start of SEA. The basement contained an industrial arts room, a pottery, and a gym which doubled as a lunchroom. A media center was located on the first floor.

Although each class's schedule of daily and weekly activities reflected variation, time was generally categorized into three major segments. The first consisted of group meetings for planning, informational, and general sharing purposes. The second consisted of "project times" during which individual or small group interests were pursued. The third was "quiet time," during which "basic skills" such as language arts, math, or social studies type activities were pursued. These blocks of time varied in both sequence and length from family to family. However, a general school-wide schedule did exist which was designed to accommodate individual variation by planning for each class's opportunity to gain access on a daily and/or weekly basis to certain types of activities. These class schedules usually included times for going to interest centers, on field trips, or to gym and media (which provided teacher prep time).

Two community learning programs had become particularly strong at the Open School by year four of SEA. The first consisted of a "community day" program (staffed by a full-time coordinator and part-time evaluator, assisted by volunteers). The community day enabled students from one or two rooms on a designated day of the week to go out into community sites for experiences that could tie into their normal classroom curricular activities. It also was designed to free up more sharing time for teachers. For a fuller description of the community day, the work of Patton (1975) is an excellent source. A second similar program was an "Other People, Other Places" (OPOP) activity, staffed by both the Community Day and Community Resource Coordinators. It enabled students to themselves initiate community contacts, "line-up" activities and resources by phone, and help plan part of the transportation logistics needed. Needless to mention, perhaps, was the considerable volunteer

assistance that was required to effectively operate the community day, OPOP, field trip, and many in-building experiences.

Each classroom was designed to maximize the use of multiple spaces for multiple purposes. Rooms were usually divided into a carpeted area, for group meetings/activities, as well as several other spaces divided by varying types of partitions. Quiet areas and areas for "messy projects" were common. Most rooms had plumbing facilities. Desks were rare. If present at all, there were usually a few pushed against walls. Tables of varying heights, plastic whistle chairs, pillows, or ordinary chairs were far more common. Flexible use of space characterized each room, with periodic re-arrangement a common experience.

For greater depth on the above and other aspects of the Open School's programmatic development, the reader should consult the works of Giannotta (1975), Olson and Patton (1975), Olson (1974), and Aldrich and Bounds (1973).

The classroom selected for study was an intermediate group consisting of 33 students. It included 10 fourth graders, 13 fifth graders, and 10 sixth graders; these were divided into 22 boys and 11 girls.

Data Analysis

Activities—Total CRTO fell into three major categories--projects (75.5%), circle or meeting times (20.2%), and clean-up activities (4.3%). Projects were coded into three major types: general projects (53.3% of CRTO), math projects (16.0% of CRTO), and language arts projects (12.8% of CRTO). The groupings are arbitrary and not exclusive. For example, general projects

frequently included use of "basic skills," sometimes in a rather direct manner--e.g., reading a book! A sampling of some of the general projects observed (several of which ran over several day periods) included such activities as sewing, cooking, building a rocket, drawing, working on a school newspaper, playing games, or rehearsing for a play--to mention a few. Some 70% of CRTO reflected varied activities--several different activities going on in the room at the same time. In terms of activity initiation, CRTO broke down into student initiated activities (33%), adult initiated activities (29.8%) and joint adult/student initiated activities (37.2%).

All (100%) of uniform activities observed were adult initiated. Of varied activities observed, 47% were student initiated and 53% joint adult/student initiated. Of total projects observed, 43.7% were student initiated, 7.0% were adult initiated, and 49.3% were joint adult/student initiated.

Varied space use predominated in both total activities and projects observed, with 79% of CRTO reflecting varied space use and 75% of total projects observed reflecting similar use. All (100%) of circle time reflected uniform space use, with students usually seated in a semi-circle on the carpeted area of the floor. Varied space use typically included use of several areas of the room with student positioning in those areas differing--e.g., seated on floor, on or in a large wooden cube, at tables, in a "closet" used for quiet work, in the hall, etc.

All (100%) of uniform space use observed reflected adult initiated activities--e.g., meetings. Varied space use observed reflected a greater spread in activity initiation--41.9% student initiated, 47.3% adult/student initiated, and 10.8% adult initiated.

Grouping—The predominant mode of grouping observed in CRTO was varied in nature--i.e., some students working alone, others working in pairs, others in small groups. It was also varied in a literal sense--i.e., it seemed to constantly fluctuate both within and between activities. During some projects, some students would move from working alone over to a small group. At times they might stick with the group for the rest of the activity or move out to another grouping mode. Other students seemed to stick in their "initial" grouping structure for the duration of an activity. No restraints seemed to be placed upon flux during most, though not all, projects observed. Of CRTO, 78.7% reflected such varied grouping. Also, of CRTO, 76.6% of total grouping reflected simultaneous use of all three major sub-types--students alone, students in pairs, students in groups.

Almost all (98.6%) of projects observed reflected varied grouping. All (100%) of circle time observed reflected uniform grouping--students addressed as a class. All (100%) of all uniform grouping observed was adult initiated. However, not all adult initiated activities utilized uniform grouping. All (100%) student initiated activities reflected varied grouping.

Adults—During 82% of CRTO, more than one adult was present in the room. For some 40% of CRTO, more than two adults were present, with some 13% reflecting the presence of more than three adults. Generally, these adults consisted of the teacher, an aide and student teachers, with some support staff and visitors also represented. Some 16% of CRTO reflected the presence of visitors. Visitors continued to be a common occurrence at the Open School, requiring the services of the community resource coordinator to both line them up and schedule them to avoid over-imposition upon both students and staff.

As previously noted, each room's schedule varied within the overall school schedule of such activities as center time (pottery, industrial arts, gym, media, or community programs). In this particular room, a weekly schedule did exist which reflected the above emphases (see Appendix D). In addition, certain days were set aside to concentrate on different tasks--e.g., Mondays for generally "catching up" on activities of the previous week; Tuesdays for flexible use of time (because these were shorter school days) in meetings discussing current events; Wednesdays for math; Thursdays for creative writing; and Fridays for reading. This does not mean that these activities were done only on those days, but rather were given particular attention on them.

Also as previously noted, activities were to the maximum extent possible structured around student interests. It was considered important for students to both clarify such interests and take responsibility for following through on them. Varieties of techniques were used to monitor clarification and follow-through. During the circle meetings, the teacher would usually go around the room making sure each student had something he or she would be doing for designated parts of the day. For some students who requested them, contracts were used. Curricular materials ran a broad gamut of "packaged" type things (workbooks, etc.); mini-packs of activities in language and math; student generated materials; or adult-made resources such as a job application form to a hypothetical company (see Appendix D). Adults usually functioned as resources. Any adult, including the author, seemed to be fair game to which students could either display activities or ask assistance. The task of general adult management placed upon the teacher was great, when augmented by the additional roles of materials producer, question answerer, paper

corrector, information disseminator, attendance taker, etc. Certain tasks were designated as primarily student responsibilities--watering plants, feeding animals, cleaning cages, and generally maintaining the room's order (a vital factor when different activities follow upon one another).

The classroom invariably was a busy place, particularly during project times. Some students might be coming and going from centers; others would be shifting groupings or perhaps activities. When other adults were in short supply, it was not too difficult a task for students who wished to do so to "escape" activities and/or monitoring of them. A good deal of responsibility seemed placed upon them to do what they committed themselves to do.

Certain times seemed fairly fixed--lunch, recess, center times, or teacher prep-times when all were expected to head for centers. Normally, centers were available to students on a daily basis. Field trips, OPOP, and community day were planned together, with the onus of initiation mainly upon students.

Adults either worked directly with individual students or groups or on other tasks--such as materials preparation or general supervision. For some activities, adults would suggest particular tasks. The teacher, for example, asked during math projects for a group interested in working on fractions. For other activities, the general content was suggested: "OK, time for math projects" and the specifics left to students to select. For still others, initiation was totally student generated. A summary of the data presented above is depicted in Figure 5.

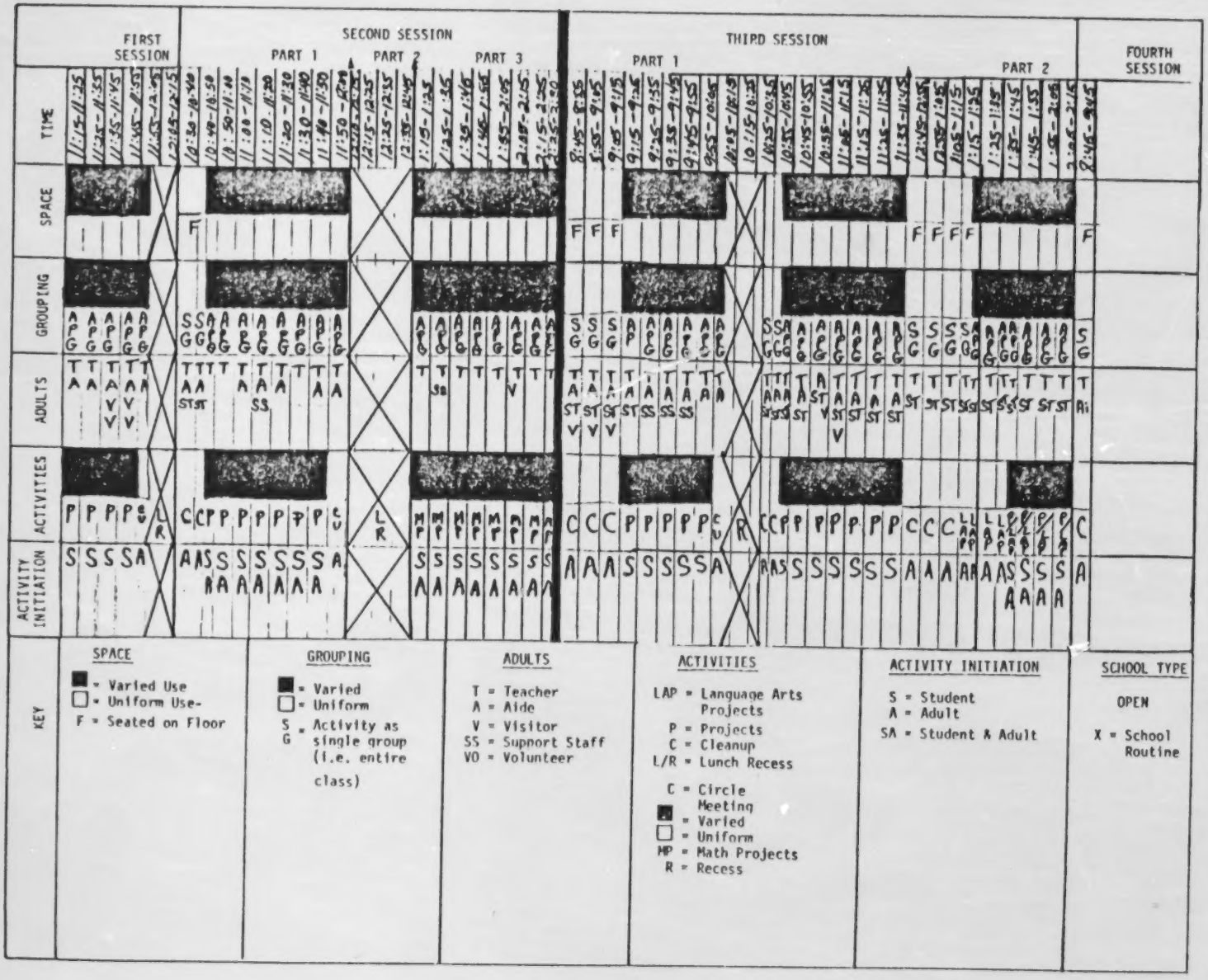


FIGURE 5
OPEN SCHOOL
DATA SUMMARY

Reflections

Activities—In contrast to the Contemporary School and Continuous Progress School programs, the Open School did not regard appropriate student learning solely as the mastery of discrete bodies of content knowledge called "subjects." Classroom instruction reflected discernible assumptions regarding student learning in general and appropriate roles for adults in enhancing learning. The use of student interests as a primary activity referent assumed that such interests would be related to sufficient motivation for follow-through on projects. This would make learning both more immediate and real. Processes observed also reflected the assumption that students could, with adult guidance, assume responsibility for a good deal of their time (and its use) in school. Such an assumption also extended to community based learning activities. The initiation of OPOP and community day was left mainly up to students themselves.

These assumptions did not necessarily eliminate the use of "packaged" curricula as learning referents. They merely re-defined the roles such materials could play. They served as but another tool. They were not necessarily seen as the only tool for all students.

Time—While we saw the use of major time blocks for major activity types, time units frequently overlapped or "ran into" one another. During the same time segment, multiple activities were often occurring. Variation was tolerated in the amounts of time students opted to spend on projects. Not all "marched to the same drummer." Again, as noted, this did not mean that there were not times when all worked on the same activity. Usually, however, if students "finished early," they moved on to something else.

Space—The deployment of space was designed to encourage multiple space use as well as sharing. Physical space and student positioning and posturing within it reflected an almost relaxed atmosphere. Nobody seemed "uptight" if one chose to do one's reading on a ladder (actually observed). This particular room began the year almost bare. Its appearance assumed increasingly richer tones--more structures, materials--and changed frequently. Most of the structures were initiated and erected by students.

Personal space, however, was at a premium. A cart of bins was about the extent of it, in addition to student lockers. Typical observation: five or six teachers around the teacher's desk (in a corner) bombarding teacher with requests for help, directions, information. High patience levels were a must.

Hall space served as an extension of class space. Item: "Food group assembles in hall." Again, however, certain spaces were generally used for certain activities--newspaper work in the "closet," meetings on the carpet, etc. The popping in and out of both kids and adults was not uncommon. Item: Student from family room across hall: "Anyone want to have a volleyball game during recess?"

Grouping—Perhaps the hardest thing to record during observations was grouping. It seemed to constantly change, often in the space of minutes. Most kids worked in groups (in terms of absolute numbers). Sharing was generally not only permitted, but encouraged. (Hence, one of the Open School's continuing rationales in its battle against standardized testing's inappropriateness.) Talking was generally permitted. It dovetailed with the assumption that kids can, will, and should learn from other kids and with other kids.

Routines and cues were part of operationalizing all of the above assumptions. Item: "Okay, circle up." (School bells rang, but only rarely seemed to signal many of the activities observed.) There were "rules" for centers--so many to a center to avoid overcrowding; sign-ups for centers; kids' "turns" at various logistical tasks. Groups often started with a few kids interested (e.g., food group), but it was "okay" for others to join in. Clean-up generally involved everyone.

Adults—As noted, adults were generally fair game for asking help, checking work, or displaying work to. Adults were people who made sure things were running smoothly. Item: "Anyone with nothing to do?" They were also people who helped one line-up field trips or provide tutoring or joined in attending mini-courses. They were also frequent visitors, who asked one questions about the Open School, about what one did, whether one chose to do it, and a seemingly endless list of other topics.

Activity Initiation—Sometimes one could decide what to do for a project; at other times deciding was done with some help; at still other times adults seemed to "lay it on"--Item: "This afternoon we're doing writing project." A big "no-no" was choosing not to choose. Item: "If you have nothing to do, see me."

H. Free School

Contextual Remarks

During 1974-1975 the Free School enrolled approximately 150 students. Enrollments reflected the highest percentages of both non-SEA and single-parent families among the SEA elementary schools. The student population was a heterogeneous one, representing a wide range of ethnic, residential, and income backgrounds. While the Open School reflected a discernible philosophy of learning with roots in such sources as developmental work of Piaget or British integrated day schools, the Free School could most generally be described as "relating to" a mix of humanistic and radical social reform movements. Its seemingly peculiar positioning within a bureaucratic hierarchy of an urban public school system deserves some explanation.

In contrast to the three schools thus far described, the Free School was created "from scratch" as a public school with SEA's first year of funding. It began year one of SEA with some 70 students. By the start of year four, enrollments were at 150. From its inception, the school experienced problems on several fronts. One was physical facilities. For its first three years it was located in rented quarters (a refurbished church) ill suited to the Free School program. Another was staffing. The SEA proposal had limited the allocation of paid staff positions. Several staff were either new or non-certified, hired on short-term contracts.

By year four, some changes were evident. The Free School had moved to new quarters (the former site of one of the Continuous Progress School's intermediate component). The new building was a welcome change--generally

more spacious and well-lit. During year four staff represented a rather young group (most under 30, as in previous years). The Free School staff was a mix of MPS, SEA-wide or school-specific, and volunteer categories--as found in other SEA schools. However, relatively larger proportions of contract or volunteer people were reflected on its staff. The school did have a principal, though towards the close of year four his contract was not renewed due to failure to qualify for recertification under MPS guidelines.

The Free School was organized into three major programs: primary (with five to eight/nine year olds); middle (with nine to twelve/thirteen year olds); and secondary (with fourteen to eighteen year olds). Each program was ungraded. Each program generally had certain activities, space, and staff peculiar to itself. However, all also overlapped in all three areas at times. Enrollment figures at Free School tended to be consistent at least along one dimension over the years--namely, their constantly fluctuating and thus seemingly elusive nature. However, during the latter part of year four, reasonably reliable figures indicated approximately 31 students in the primary, 48 in the middle, and 65 in the secondary programs.

The Free School's new quarters consisted of a two-floor school building. The use of space in Free School was multi-functional, though for the sake of presentation some general descriptions can be given. The first floor housed a gymnasium/auditorium with a stage; a kitchen area; a primary shop; and a pottery--with all of these areas bounded by four corridors. Along one of these corridors could be found a primary room; a primary quiet area; a supply room; an office; a tutoring room; and an area where the school's internal evaluator, social worker and other support staff had some space.

Finally, a community resource room; staff lounge; staff lunchroom; shop; and music room were also located on this floor.

The second floor housed an art studio (with photography room); a science room; a middle/secondary quiet study media center; a math room; two secondary rooms and secondary lounge; and a middle room and lounge. The multifunctional use of most of these spaces was related to both grouping and curriculum structures employed at Free School.

Grouping was framed around the use of advisor (adult)/advisee (student) relationships. At the beginning of a school year, each staff person (including clerical) was assigned as an advisor for one of the three programs. The advisor was expected to help students plan their activities, do some monitoring in the form of written progress reports, and record at least one parent conference a year.

Time at Free School generally fell into three major categories (under ideal conditions). Considerable variation within, and overlap among, these categories existed by age group. The three categories were (1) academic activities, (2) electives and (3) use of resource areas such as shop, gym, music, art-rooms.

Turning specifically to the middle program, planning was done on a trimester basis and involved the use of two types of schedules. The first trimester began in the fall, the second around Christmas, and the third around Easter. Each trimester, a general schedule of courses, activities, and events projected as available was printed up (see Appendix E). Working from this schedule, an advisee would plan out his/her individual schedule.

(See Appendix E for spring schedule of student tracked.) A general ground-rule seemed to be that one had to plan in a minimum of four hours weekly class time for language arts and math activities. Though several students might have the same advisor, their individual schedule could and often did look very different.

What was the "curriculum" at Free School? There were no neatly packaged objectives or standardized curricular series that one might point to as forming the core of the Free School curriculum. This is not to say that there existed no conceptions or operationalizations of what school participants considered appropriate learning. Rather, very much like the Open School, learning was seen as best generated from student interests. It stressed process-oriented learning, in addition to acquiring the basic skills in an "integrated curriculum" fashion of "real life" learning. In addition, it had definite philosophic overtones mirroring a melange of counter-culture (e.g., "survival skills") and social reform (e.g.,"anti-racist, -sexist") thrusts. An example from the April 1975 issue of the SEA newspaper:

> The school considers that choice making by students is basic to good learning and essential to adult responsibility. It accepts student interest as a legitimate starting point for all learning and gives students freedom to pursue that interest wherever it leads.
>
> Free School encourages students to involve themselves directly with issues of reform and change in all institutions of society. Its ideal graduates are not those who can smoothly 'fit in,' but women and men who will make their communities more just.

Before turning to data analysis, some important methodological notes are necessary. As observed earlier in this study, Free School's lack of

"classes" in the traditional school sense presented problems. Also, because "advisee groups" did not function as groups, I opted to track a single student from the middle program as an alternative strategy. Such a strategy presented some coding problems, particularly with such categories as space, grouping and activities. For example, how could one code any of these as uniform or varied, when no other members of a "class" of peers was able to be used as a comparison? Although the fact itself that such a problem even arose said much about Free School variation relative to its companion SEA schools, some adjustment was required in data coding. Fortunately, a good deal of time observed was spent in the company of other students (mostly by our studied student's opting into definable spaces and activities). In a sense, therefore, the entire building was considered the student's "classroom." It was thus possible to code those situations where students gathered together were grouped in a uniform or varied way, were engaged in similar or different activities, or were using space in a similar manner. As in coding of the other SEA schools, school routine and/or extra classroom (building at Free School) activities generally were not coded. While each school had its fair share of such activities, they did not form a focus of study, although some discussion is devoted to them.

Our contextual summary has been highly selective. For a fuller description of the Free School, the reader is referred to the works of Reeves (1975) and Nelson, et al. (1975).

Data Analysis

Activities—The majority (79%) of activities observed were varied in nature. These activities fell into six major categories: music-related activities (38.3%); language puzzles and games (23.3%); math (16.0%); moving about the building and chatting with peers (13.8%); conferring with advisor (6%); and in pottery (3%).

During the periods of time observed, some 80% of activities were student initiated. The remainder reflected joint student/adult initiated enterprises. Almost all (88%) of varied activities observed were student initiated. Over half (55%) of uniform activities observed were student initiated, with some 35% of these adult initiated.

It is important to note that activities observed did not necessarily correspond to those listed on the student's individual schedule. Arriving at the school with such an expectation proved almost foolhardy. As a matter of fact, I soon discovered that activities were often a hit or miss affair, for a variety of reasons. To mention a few, daily monitoring by adults of what our students did seemed an inappropriate expectation. It was expected that the student would assume sufficient responsibility in programming her activities. Also related to this situation were two additional factors: (1) not all centers could be expected to be open or necessarily containing activities on the "master" schedule, nor could several adults "manning" them always be expected to be present, and (2) sometimes ad-hoc activities would be generated, which took precedence over previously scoped ones. The first factor was related partly to variable and insufficient staffing of some rooms/activities. It also reflected a situation which arose during the period of study--namely, a field trip to

Washington, D.C. This trip had drawn off roughly half of the middle students and several staff whose centers/rooms remained empty.

The second factor--ad-hoc activities--seemed far from uncommon. One morning I arrived at the school to discover that our student had decided to go on a picnic and museum visit, planned in the halls that morning. On another occasion, she was off to Northern Minnesota for a week on a canoe trip. Other mornings, she might be out of the building for a while.

Reeves (1975:31) isolated several common characteristics among the varying ways middle students spent the day:

- Collecting friends. (This may occur in the bus on the way to school, in the hall before school starts, or in the first room the student goes to at 9:15.)
- At some time in the course of the day the student will go with friends to the corner store for a snack.
- At some time the student will spend from ten minutes to two hours in the math room.
- Slightly more than half the students will spend some time in the gym, up to an hour each time.
- Most students will spend some portion of the day socializing--in the hall, the community resource room or outside in warm weather.
- Most, but not all, will spend some time in the room of their choice on a project--in the science room tending plants or animals; in the media center sewing or reading; in the art room exploring techniques or materials; in the shop making a boat, a box, a wood sculpture or a beautifully laminated boomerang; or in a class in the middle room.
- Most will spend some time wandering around, complaining of boredom in the office, in the hall, or in any of the rooms.

Over the course of our study, almost all of the above activities were observed. Adults also played key roles in curriculum formulation. For

example, the general schedule of offerings has already been noted (see Appendix E). Over the summer of 1974, a curriculum writing group generated a range of short and long-term activities that would be offered the coming year (Reeves, 1975:45). Some samples: Competencies or values--anti-sexist, anti-racist attitudes; Women in Art, Sports, Science and Medicine and Politics; Botany, Biology, Ecology, Gross Earth Systems.

While a list of graduation requirements did exist at Free School, Reeves found that 15 of 17 older middle students interviewed had never seen a copy of them. The area students seemed most aware of was math. Math at Free School was offered in a room designated for that purpose and staffed by a teacher with volunteer help. It was one of the more highly organized parts of the curriculum (see Appendix E)--with specific objectives specified; materials (including computer use) keyed to objectives; and individualized packets of work materials kept in folders for each student. Our student informed me that she would work on them as she wished and was observed doing so on a number of occasions.

The dominant mode of space utilization observed was <u>varied</u> (68%), though some activities reflected uniform use as well (e.g., sitting with band). Though most math activities observed reflected similar use of space (73.3%), it seemed not to matter if some students chose to work in varied locations (e.g., not all sitting at tables). They were also observed to do so. Some 87% of total varied space use observed reflected student initiated activities. A typical example was time spent in the media center, where some students would be sewing, others working on games/puzzles, still others reading. Our student used a good deal of time spent there to play or practice guitar.

Grouping—Varied grouping modes predominated during observations. They represented 79% of CRTO. As our student moved with such areas as the media center, or the music room, the modes of grouping reflected generally were the "working alone, while others worked in pairs or small groups." Some work was done with adults--e.g., receiving tutoring from a volunteer in techniques of guitar playing. Other work, such as solving word puzzles (see Appendix E) were done while sharing with one or two other students. Quite a bit of time observed was spent working alone. Grouping, with the exception of some time spent in band, seemed almost always student initiated. Some 87% of total varied grouping time observed reflected student initiated activities. Almost 90% of math time mirrored varied grouping--with some students working alone, others in pairs or with the teacher.

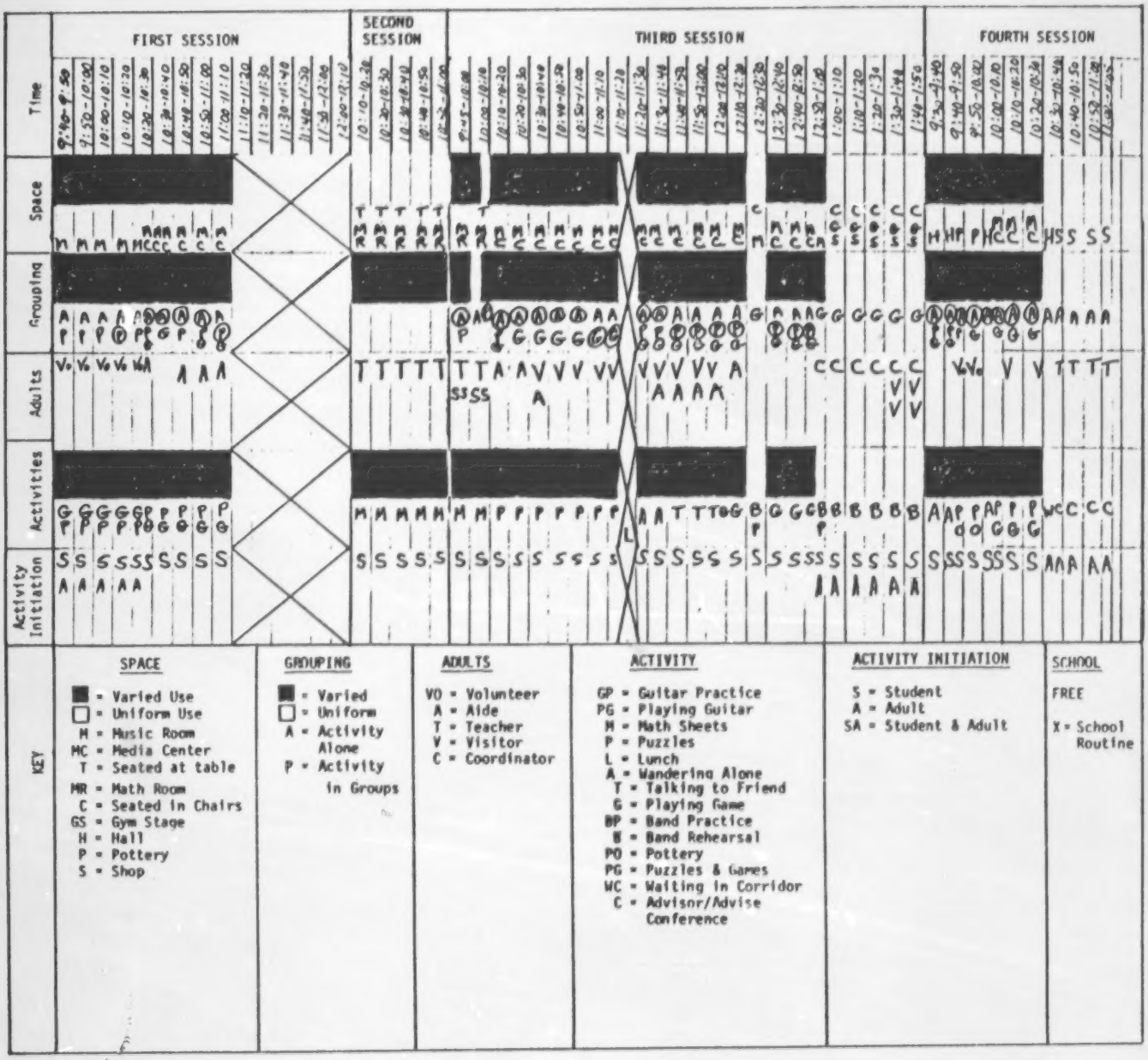
Adults—Over half of CRTO (63%) were activities, where one adult was present in the room. Roughly 20% of CRTO was spent in activities where more than one adult was present; 17% of CRTO represented situations with no adult present.

During slightly over one-fourth (26%) of occasions observed where more than one adult was present, uniform grouping was used (e.g., a band concert for visitors to the school).

To summarize, space, grouping, and activities overwhelmingly reflected varied modes--simultaneous use of multiple spaces, combinations of people, and activities. Generally, situations where one adult was present predominated. These adults included volunteers, aides, or teachers. Free School distinctions among these categories did not seem to "matter" very much to our student. Activities observed were primarily student initiated. A summary of the data presented above is depicted in Figure 6.

FIGURE 6

FREE SCHOOL
DATA SUMMARY



Reflections

Activities—One cultural premise was that "appropriate learning" ought to be heavily student-referenced in its definition and operationalization. Another premise viewed learning as the acquisition of tools for promoting change in a society viewed as often hostile and greatly in need of change. Item: a math exercise that used credit card ripoffs to teach computational skills. Varieties of posters, signs and announcements pasted on walls in the hall announced counter-cultural types of events considered of interest.

Considerable emphasis was placed on individual, as well as social, awareness. Responsibility for oneself was stressed in addition to commitment to social action. It was okay for students to be engaged in differing activities while in the same physical locations at the same time. It was okay to initiate activities which would carry one into the community.

Time—I quickly discovered that time at Free School was characterized by an ad-hoc unpredictability. Item: "Not too many students around today probably because it's rainy." Or: "Not too many kids here since it's so sunny today." Activities observed generally were of the "I guess I'll go... or do...now." Yet, some activities also seemed to have been pre-planned--e.g., appointments with volunteer for guitar lesson or with band instructor for rehearsal. Some activities seemed planned almost "on the spot," such as a field trip decided upon in the hall one morning.

Starting times were simply things one could not "count on" at Free School. Item: "It took us a million years to go on one camping trip. We were supposed to leave at 9 and left at lunch."

Again, basic responsibility for time use was placed upon students. Item: "You have to put in four hours on skills when you make your schedule. Sometimes I don't go to some of the stuff I put down." Free School required a good degree of tolerance for ambiguity.

Space—It was okay to go out or wander about and check out various spots both within and beyond building confines. Multiple space use predominated. Item: "I'm going home."

Space and time use were closely related. Both were subject to occasional traffic. Item: (Poking head in door) "Anyone in here interested in a bikathon to raise money?" Or: "Anyone seen some primary kids come through here?" Or: "Sometimes kids just give up and stop coming when nobody shows." Or: "Sometimes adults give up after waiting so often, nobody showing, or seeing them all out playing ball on a nice day."

Grouping—It is okay to work with older or younger peers or with varieties of adults. It is okay to arrange, for example, an internship in a community agency. Groups form, dissolve, and restructure themselves according to individual needs, desires, or activities.

Adults—As at the Open School, adults at Free School were addressed informally, usually by first name. Some adults seemed more "uptight" than others about certain things. Item: "He fines us ten cents if we're late." Several adults offer things "they're into" for us. Item: "I learned a lot about the establishment and the CIA, but not too much else in that one." Some adults seem more "together" than others.

There were rules. Most of them related to learning not to bother others or property, or how to take care of oneself. Item: A sign detailed rules for lunch such as no shoving in line or throwing food. At the end of the year, one can expect to meet with one's advisor, who has all the cards from teachers whose classes have been attended. Value is placed on information which shows that one has assumed responsibility and followed through on attendance and activities. Item: "You haven't been like so many others who don't come or slack off and fool around all day." Or: "Kids move on from program to program when they think they're ready for it." Or: "Attendance figures tell a lot at Free School since basically we don't require them to come." Or: "Figures, I'm told, are sometimes taken by teachers 'impressionistically.'"

Attendance was always tricky at Free School. Some secondary students, for example, worked part-time and hence were not present for all classes. Other students sometimes had to return home to attend to family matters.

Activity Initiation—One is expected to be an agent responsible for one's learning. Item: "Nobody's gonna tell you what to do." Or: "I do them (i.e., math exercises) not because I have to. If I don't, I won't learn."

I. SEA As a System of Alternatives

We began our discussion by posing the question: Are the SEA schools indeed alternatives? In light of the results of our investigation, our response must be positive: Yes, substantial cultural variation was found among all four schools. Expectations regarding appropriate behavior within instructional environments did differ.

Some Dominant Emphases

Looking first at results along the six dimensions analyzed, one finds each school reflecting discernible emphases. Two qualifications that must be kept in mind, however, are: (1) these emphases represent four intermediate classroom environments and (2) several interacting "overlaps" were also exhibited, which we shall discuss in a section devoted to dominant similarities.

One means of viewing dominant emphases is to simply look at relative percentages of total class routine time observed, as these were distributed along each dimension. Figure 7 presents such a distribution.

Percentages in the categories space, grouping, and activities represent amounts of class routine time devoted to either uniform or varied use of space, grouping modes, and activities. Percentages in the adults category represent amounts of time when more than one adult was present in the room. Percentages in the activity initiation category should be read as follows: undarkened and darkened areas each represent total uniform (undarkened) and total varied (darkened) activities observed. Within each sub-category (i.e., uniform and varied), percentages are given which reflect types of peoples'

FIGURE 7

DOMINANT EMPHASES OBSERVED
ALONG SELECTED DIMENSIONS OF CLASSROOM
INSTRUCTIONAL PROCESSES

		INTERMEDIATE CLASSROOMS OBSERVED			
		Contemporary	Continuous Progress	Open	Free
Space		76.6 / 23.4	59.6 / 40.4	21.3 / 78.7	31.9 / 68.1
Grouping		63.8 / 36.2	64.9 / 35.1	21.3 / 78.7	21.3 / 78.7
Activities		79.8 / 20.2	68.1 / 31.9	29.8 / 70.2	21.3 / 78.7
Act. Initiation	Uniform Act.	Adult 100	Adult 100	Adult 100	Adult 35 Adult/Student 55 Student 10
	Varied Act.	Adult/Student 35	Adult/Student 73.3	Adult/Student 53.0 Student 47.0	Student 87.8
Adults More than one in room		29.8	95.7	81.9	20.2

= Uniform

= Varied

NOTE: Figures represent percentages of total classroom routine time observed (470 minutes)

(adults, students, or both) roles in activity initiation. For example, of all varied activities observed at the Continuous Progress School, 73.3% were the result of joint adult/student initiation.

Differences among the four schools appear most striking in the categories of space and activities. The Contemporary School revealed the highest utilization of space in a uniform manner (generally students seated at desks), followed by the Continuous Progress School (students generally seated at tables). These results contrasted sharply with those for Open and Free schools, which both revealed almost opposite tendencies. A similar pattern is evident for activities. The Contemporary and Continuous Progress schools exhibit highest uses of uniform activities, with this tendency almost reversed for Open and Free schools. In both categories, some progression from Contemporary to Free is evident (considering Free School uniform space was largely devoted to band practice). (Adult input into how space was used also varied, with greater input noticed during our study at the Contemporary and Continuous Progress schools, and less adult input at the Open and Free schools.)

The two categories of grouping and adults also revealed some interesting variations and overlap. Results for grouping in Contemporary and Continuous Progress schools were almost identical and were identical for Open and Free schools. Results for adults present indicated another interesting parallel. The Continuous Progress and Open schools were closest to one another, with the Contemporary and Free schools similarly close to each other. (Again, adult input into grouping modes also varied, with greater input noticed in the Contemporary and Continuous Progress schools and more student input observed in the Open and Free schools.)

The category activity initiation revealed identical results for uniform activities across three schools--Contemporary, Continuous Progress, and Open. Variation here came with the Free School, accounted for mainly by a game activity initiated by our student and paralleled (in terms of grouping) by other students also being mainly in pairs. Far greater variation was evident regarding varied activities, with a progression from the Open to Free school in terms of solely student initiation. Again, qualification is needed. At the Contemporary School, most varied activities observed were initiated by the teacher alone. (However, school routine activities such as recess would have been just the opposite, if coded.) At the Continuous Progress and Open schools, much higher percentages of combined adult/student input into varied activity initiation was evident, with solely student initiation making an appearance at the Open School. Solely student initiation of varied activities was highest at the Free School. Again, in interpreting the results of comparisons along all dimensions, extreme caution is a must due to both sample size and the fact that the importance placed upon such dimensions at each school varied considerably. Judgments of a better/worse nature ought to be particularly avoided.

Indeed, if judgments are to be made at all, they can only be that each school appeared to be generally functioning not too off the mark of the ways it sought to function. That is, differences appeared "healthy" from the standpoint of creating a system of options in instructional environments.

Some additional dominant emphases, not evident in so limited a perspective as the above dimensions, might also be summarily mentioned. The reader is urged to consult additional research (see References) pertinent

to each school. As noted, the Contemporary School student population reflected a "heavily" blue-collar neighborhood school orientation. Those of the Continuous Progress and Open schools were more similar--middle class and more heterogeneous. Free School enrollments reflected greatest non-SEA and single-parent families. Some of those were students for whom no previous school seemed to "work." They also tended to mirror counter-cultural life-styles and values.

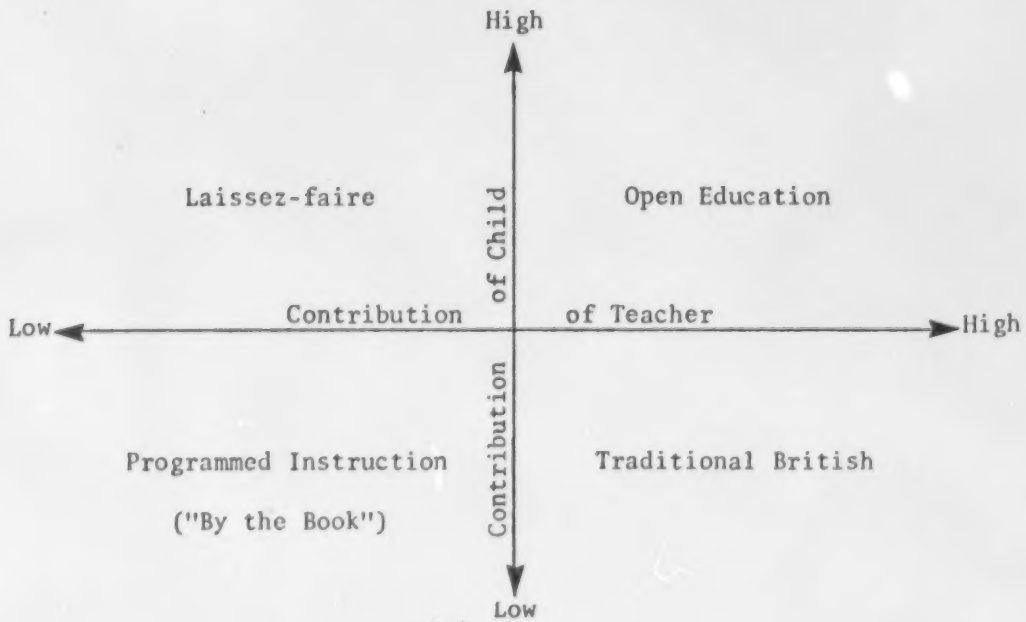
Varieties of conceptual models which attempt to categorize various schooling types have appeared in research literature over the years. Three of these are presented below as crude approaches to shedding some further light on dominant emphases. Classifications of the SEA schools within each are my own and are intended mainly as heuristic devices--not hard and fast descriptions. They represent more general tendencies as I would see such if asked to describe the various schools within such models.

The first approach is drawn from Epstein and McPartland (1975:7), who distinguish "open" from "traditional" schools along seven major dimensions. Each dimension is presented below along with my own positioning of each SEA school on a scale of "Found More Often" or "Found Less Often."

	Found More Often	Found Less Often
1. In class I must sit next to the same students.	Contemporary Cont.Progress	Open Free
2. I can talk to other students while I work.	Open Free	Contemporary Cont.Progress
3. In class, I can move about the room without asking the teacher.	Open Free	Contemporary Cont.Progress

	Found More Often	Found Less Often
4. In class, the teacher stands in front of the room and works with the class as a whole.	Contemporary Cont.Progress	Open Free
5. When I am working on a lesson, the other students in my class are working on the same lesson.	Contemporary Cont.Progress	Open Free
6. Most days there are several assignments the teacher tells me I could select, and I choose the one I want to work on.	Open Cont.Progress	Free Contemporary
7. I could fall behind in my work without the teacher finding out about it for a couple of weeks or more.	Free	Contemporary Cont.Progress Open

A second model, emphasizing the variable of activity initiation, is that of Bussis and Chittenden (1970:23). This model looks at degrees of input from both teacher and child. It depicts such input as forming four major types of schooling.



Were one to look at the SEA options, solely along the dimension of the extent to which adult and student were each active contributors to decisions regarding the process and content of learning, a gross distribution might place the Free School in the Laissez-faire quadrant, the Open School in the Open quadrant, and the Continuous Progress and Contemporary schools in the lower right quadrant.

Smith and Keith (1971:331) examined the development of an elementary program similar in many respects to SEA programs. They developed an initial conceptualization of individualized curriculum and instruction. Though it required subsequent modification to fit their specific purposes, it provides a useful point of departure. The model posed five levels distributed along dimensions of curricular goals, materials, and rates. SEA schools which seemed to generally dovetail in emphasis are noted alongside certain levels.

Level			
5	Pupil choice in goals, materials, and rates.	Pupils determine ends, means, and rates.	Free School
4	Different goals, different materials, and varying rates.	Pupils work toward different ends (for example, enrichment) which involves different materials and varying rates as well.	Open School
3	The same goals but varied materials and rates.	Children are directed towards the same outcomes but may branch into special material (often remedial).	Contemporary School
2	Individualization: variation in rate.	Possible variation in starting point; some children move through the material faster.	Continuous Progress School
1	Traditional lock-step.	All children in the same books and materials, moving at the same rate toward the same goals.	

McNeil (1969:300-302) has developed the notion of "data source" as a way of looking at curriculum development. Curricula may be distinguished according to relative weight given to either subject matter, or society, or the learner as a "data source." All such "data sources" were reflected in varying degrees at each SEA school. In general, however, the Free School stressed needed societal changes as well as learner interests. The Open School particularly stressed the learner. The Continuous Progress School seemed to underscore subject matter (e.g., IMS math) and the learner (e.g., interest groups). The Contemporary School, as seen, attached considerable importance to subject matter. Our description, again, reflects impressions of gross tendencies--not absolute boundaries.

Indeed, the dangers of all such models only highlight the high degree of internal variation in each SEA school. Such dominant emphases as noted are far from total or the only emphases. On the contrary, one key to successes attained by SEA in developing a system of choice is the availability of "within-building" variation. The ease with which stereotypes can become attached to individual alternative schools (as often happened in SEA) is a pitfall practitioners considering alternatives might wish to doggedly combat. Not all Contemporary School students "sat at desks all day." Not all Continuous Progress School students "moved around all day." Not all Open School students attended "a big playpen." Not all Free School students "did nothing but goof off and smoke." Not all teachers at any SEA school taught as the teachers observed. In fact, each school seemed to house a spectrum of styles, overlapping with the styles at the ends of other continua of other SEA schools. Free School had some rather "structured" teachers; the Contemporary School ran a highly successful open classroom.

Some Similarities

What then can be said about "points of overlap"? Were all the SEA schools really the same with but a veneer of difference on the surface of each? Far from it, but they did evidence several similarities both across all or some of them. Some of the more shared features included relatively small size; staffs who were present by choice; families who patronized them by choice; and a variety of shared influences emanating by virtue of both SEA and MPS status.

The several alternatives shared the services of SEA-wide curriculum coordinators; internal evaluators; selected support staff (e.g., social workers, counselors); community resource coordinators; and volunteers. Each of these services had its impact, sometimes similar (never identical), on the various schools. The Free and Open schools language arts programs looked strikingly similar in certain aspects. Coincidence? Hardly. The same curriculum coordinator served both. Curriculum stressed naturalistic approaches to "languaging." Some schools, such as Continuous Progress and Contemporary, used computerized monitoring and curriculum development tools. Computer terminals for math could be found at Free, Contemporary, Open, and Continuous Progress schools. Counselors and/or resource coordinators tended to handle enrollments and transfers. Community resource programs were strong across all SEA schools (Patton, 1975), particularly at the Open and Free schools for which they were vital.

All schools, sometimes reluctantly, fell under the inescapable umbrella of the Minneapolis Public School system. School days began and ended under MPS guidelines. School buses rumbled across the district every morning and

afternoon. Certain staff positions, time, and rights to time were set by MPS guidelines. Buildings were assigned engineers based on square footage. Signs on school doors extended an official MPS welcome to visitors. City-wide desegregation guidelines, testing programs, health services, and so on touched the life of every SEA school.

As noted, sometimes such "facts of life" were reluctantly accepted; sometimes they were challenged. The Free School did not appear on MPS official maps for some three years; it lost its principal in year four to state guidelines; it opted out of city testing programs; it fought for greater contract security for its staff (and lost).

We have seen how some programs on some dimensions resembled others. Both the Free and Open schools were interested in student responsibility for learning. The Free School risked a bit more in operationalizing such an interest. Yet, in a sense, was it really "a risk" to fulfill "radically" a "radical" philosophy? Both the Open and Continuous Progress schools were also interested in basic skills, student learning through an "integrated" curriculum, and student affect. The Open School provided interest centers (available daily), the Continuous Progress School provided interest groups (changed biweekly). Both the Contemporary and Continuous Progress schools stressed curriculum development, packaged series, and standardized monitoring. The Contemporary School started students off in grades on grade-referenced materials. The Continuous Progress School opted to take the "ungraded" path.

To summarize, the SEA schools did appear to constitute real alternatives, though individual schools did overlap on specific dimensions examined. Some similarities were shared by all schools--with several of these both MPS and

SEA referenced. Some characteristics of SEA as a system of alternatives were not atypical of other public alternative schools. For example, results of a 1974 nationwide survey of public alternatives conducted by the National Alternative Schools Program at the University of Massachusetts revealed the following: (1) over 60% of programs represented (over 300 schools) had begun within the last three years; (2) over 80% were less than five years old; (3) some two-thirds of the programs had less than 200 students--i.e., small size; and (4) over 60% of the students came from urban areas--i.e., a definite urban orientation to programs.

J. SEA As a System of Schools

Dreeben (1973:455) has isolated two central questions posed by the rise of alternative schooling in recent years:

> How likely is it that the character of public school teaching will change in response to the availability of alternatives, and how likely is it that teaching under the alternative plans will eventually come to resemble that prevailing in the public schools?

We shall explore some brief answers to Dreeben's questions by looking at two main aspects of the SEA schools examined--their character as schools and some features of classroom instructional environments. The SEA "components," "options," or "alternatives" remained, despite such terms, American public schools. The work of Smith and Geoffrey (1968) and Jackson (1968) has highlighted some rather persistent characteristics of public schools. One such characteristic is the routinization of interaction occurring within them. Regardless of the "innovativeness" or "uniqueness" of specific programs, school seems one of the most resilient of social institutions. Regardless of programs' individual philosophic orientations, rules (both codified and informal) inevitably appear as a tool of routinization.

SEA schools proved no exception. Both external and internal evaluation studies (e.g., Olson and Patton, 1975) have variously focussed upon rules and school participants' internalization of them. Rules emanated from MPS, SEA, and school-specific influences and needs. What appeared to differentiate some SEA schools from others was the degree of rule externalization and enforcement. What appeared to differentiate SEA schools from non-alternatives studied by others (Jackson, 1968) was not necessarily the existence of rules, but the contexts in which they existed and were applied.

To briefly illustrate some cross-SEA variations, the work of Jackson (1968) is of help. Jackson highlighted such seemingly inescapable features as the presence of crowds in schools. Dreeben (1973:456) has echoed this observation:

> One can view schools in terms of structural "responses" to the problem of managing the lives of large numbers of children gathered in confined spaces for long term instruction.

Jackson isolated students' experiences of delay, denial, and interruption as partial effects of the "crowd" phenomenon. Such an issue directly relates to our examination of space, time, grouping, and adults in SEA. Certainly all schools revealed some degree of acquaintance with students' experiencing delay. At the Free School, one student entered the music room while the volunteer was tutoring another. The entering student was politely told: "Be with you in a while, when I'm finished here." We also observed some examples of denial (e.g., "The gym's full. I wanted to play tennis, but it's all signed up.") as well as interrruption (e.g., "Anyone seen any primary students here?"). The Free School was selected as illustrative, because of its "stereotype" status as SEA's "farthest out" option.

As noted, time, space, grouping and adults are all critical factors in gauging the impact(s) of such traditionally cited influences upon SEA students. Lortie (1973:479) has observed:

> A major change taking place today is the broadening definition of what is considered to be instructionally significant... The free school movement, for example, rejects much of the organizational paraphernalia of public schools...

Given the presence of problems (from both students' and adults' perspectives) emanating from a requirement of multiple "people management" within defined spaces called "schools"--we may ask: What differences did SEA exhibit, relative to handling such seemingly universal difficulties? Our response must be that while SEA schools may not have eliminated such factors as constraints, they were able to differentially re-define their import. Time, space, grouping, and adults all were handled according to each school's cultural priorities. Thus, the boredom of a Contemporary School student may not have been the boredom of a Free School student.

This does not deny that both Contemporary and Free school students experienced, no doubt along with millions of their peers across the country, some boredom some times! For example, Free School students' boredom seemed related to "having nothing to do"--not to being bound into a uniform space or grouping mode. We observed one Continuous Progress School student who had "had it" with being "on the move." We might marvel at such complaints amidst SEA's relatively rich schooling environments, attempting to address multiple goals, needs, and interests. What might give one pause, however, to marvel even more was the vast majority of students who did not complain of boredom (though they may well have been) as they moved onward through their daily routines. While school routines were not coded in data analysis, they not only resembled one another, but they resembled closely, no doubt, the school routines (including seasonal cycles) of countless other non-SEA schools -- times for lunch, recess, prep time, dismissal, the bus, parent conferences, and so on. Again, Free School evidenced greatest differences here from its counterpart schools.

Ultimately, one might assume, SEA differences from non-alternative systems would revolve around the question of the "role of the teacher." Unfortunately, as results of our study revealed, there was no uniform answer to this question--even on the highly specific issue of classroom activity initiation. Variation among schools was clearly evident--again, a "plus" for SEA from the standpoint of offering alternatives.

To briefly illustrate, Jackson (1968) depicted teacher roles as typically including that of gatekeeper of dialogue, supply sargeant, granter of privileges, and time keeper. Smith and Geoffrey (1968) provide a conceptual glossary on "the behavior of teaching." It includes such notions as preparations for contingencies, the provisional try, ringmastership, and others of equal interest. Are results of such authors' works totally inapplicable to SEA teachers by virtue of their "alternative school" work status? Hardly. Almost all concepts listed were observed of teachers or functioning as teachers during our investigation. Again, the specific content (e.g., ways of being a "ringmaster") varied by school and teacher observed. Each school's cultural milieu had some influence upon the operationalization of such concepts. Each teacher's personal instructional style added an additional influence.

What seemed to distinguish SEA settings observed from teacher roles as described in non-alternative settings was an almost uncanny "match" between teachers and the schools within which they taught. Comfort levels seemed high, though it would be presumptuous to deny that role adjustments were not required from what one might expect in non-alternative settings. (Such adjustments form the subject of a companion study to our own.)

To summarize, in response to the questions posed by Dreeben, SEA as a system of alternatives reflected discernible departures in the character of its instructional environments, as well as some undeniable parallels with non-alternative public school settings. SEA was found to function as both a system of "real" alternatives and, at the same time, a system of public schools.

PART III: TEACHER PERCEPTIONS OF ALTERNATIVES

A. Introduction

The focus of this study will be teachers and their perspective of teaching in an alternative school setting. The context is the National Institute of Education's Experimental Schools Program (NIE/ESP) in Southeast Minneapolis, known as Southeast Alternatives (SEA). To more fully comprehend the setting of this study and its implications for the teachers involved, it is necessary to regress to pre-SEA conditions in Southeast Minneapolis and examine some aspects of the foundation on which the Experimental Schools Program was placed.

In 1971, the National Institute of Education designated Southeast Minneapolis as one of the sites for its funding of alternative schools. That choice had several advantages regarding the implementation of alternatives. Geographically the area was manageable with distinct boundaries corresponding to the former enrollment area of Marshall High School, grades 7-12, and its feeder elementary schools: Pratt, Motley, Marcy and Tuttle. With the advent of SEA, each of the elementary schools would address a building-wide alternative. (Pratt/Motley were combined to accommodate the continuous progress alternative. In 1974, Motley became the Free School building.) The secondary school would address all the elementary alternatives at its level. In addition, a Free School K-12 was inaugurated.

The population of the area was a mixture of blue collar, white collar, student and professional persons and was composed of a white/minority ratio similar to the city of Minneapolis at large. The school population reflected this admixture. Of special note is the presence of the University of Minnesota and its increasing influences, since World War II, on the composition of the population of southeast Minneapolis (French, 1974).

The presence of the University of Minnesota had an additional effect on the public schools in the Southeast area. Student teachers and interns had been a part of the scene for some time. The Pratt and Tuttle Elementary Schools had functioned as arenas for experimental programs presided over by professors of education at the University with the attendant corps of graduate students in and out of the classrooms. (In fact, Pratt instituted its continuous progress alternative a year before SEA.) The merger in 1968 of Marshall High School and University High School (a lab school on campus for select students, grades 7-12) initiated additional close ties between University personnel and the local public schools. University professors and their lab school teaching staff were mingled with the staff of the traditional neighborhood secondary school, Marshall High, in an effort to combine the two student bodies and their respective cirricula. There was, therefore, along with the normal workshops and continuation courses, a higher rate of contact with University personnel and programs than would be found in a school district geographically removed from the University. This exposure to experimentation occurred prior to SEA and it was with this background that administrators, teachers and students launched on the five-year federally-funded program.

With the advent of SEA, teachers in Southeast were given a choice of remaining in their respective schools or transferring out. There were a few transfers from one alternative elementary school to another.[1]

Although given a choice, it is noteworthy that seniority within a school in Minneapolis is important to teachers for both security of position and status. Even though a teacher has fifteen years' experience, if s/he transfers to a different school, building seniority would place that teacher on the bottom rung of the ladder. This could mean exposure to being "bumped" to another school if, for example, the school population changed and a reduction in staff was necessary. Many of the teachers in Southeast Minneapolis had many years of service in their schools. They enjoyed building seniority, they were comfortable in their surroundings with a staff that was familiar, and many voiced a desire to teach in an alternative. Thus, there have been personnel changes due to the usual reasons, e.g., moving residence out of the city, pregnancy, retirement.

At the onset of the program, there were teachers who hailed SEA as an opportunity to teach overtly as they had always wanted to. There were others who had managed experimentation and change with University people, but who weren't sure what this new development would bring. Whatever it entailed, when put on the scales with transferring to a different area of the city, the choice was to stay with the familiar and find out.

This study will explore what is involved in teaching in an alternative school setting from the perspective of the teacher. It will look at the salient problems and rewards, and attempt to compare and contrast what is unique about teaching in alternatives.

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[1]The problems of merger and change at the secondary school will be dealt with in a forthcoming report.

B. Methodology

The external evaluation of the Southeast Alternatives is the responsibility of the Minneapolis Evaluation Team (MET) of Educational Services Group (ESG). The team is composed of anthropologists, sociologists, psychologists and educators. There will be no attempt here to discuss in detail the methodological basis of that evaluation, but the reader is referred to Research Methodology in Alternative Education Settings: The MET Plan (Nelson and Giannotta, 1974).

Pursuant to that evaluation, MET in 1973 placed individual staff in each of the SEA schools to observe the school cultures and glean what Pelto describes as "the factual information concerning 'what is really going on'" (1970:326). The results of their work are an ethnography for each of the SEA schools. The importance of the ethnographies is not just their "total picture" of each alternative. They provide, in addition, the basis from which related research can emanate.

The manner in which I, a researcher responsible for the teachers study, employed the ethnographies was to read them carefully for content and note areas that pertained to teachers. Those areas were then further refined to produce foci of concern and reward that teachers became aware of in teaching in an alternative. From those foci, open-ended questions were formulated to "get at" the perspective of those interviewed, as well as relate the SEA circumstances to former teacher situations: what had changed, how had it changed, what effect did the teaching milieu have on the individual? (See Appendix A for a sample interview schedule with initial questions and probe areas.)

I am an anthropologist and teacher by training. Marshall-University High School, grades 6-12, was my specific area of research in 1974-75. I had no difficulty, however, in interviewing elementary as well as secondary teachers. Colleagues in their respective schools eased entrance when possible by setting up interview sessions at times they knew to be convenient to teachers' schedules. I found that my ability (aided by my teaching background) to empathize, produced a congenial atmosphere which allowed for elicitation of additional information. (Only one teacher was hesitant and that was a very temporary situation. It was I who eventually had to excuse myself.)

Nineteen interviews were conducted in this manner with five teachers from Marshall-University High (MUH), four each from Marcy Open School and Tuttle Contemporary School, and three each from Pratt Continuous Progress School and Free School. The sample was not random, but purposive. There was an attempt to achieve a balance between teachers whose service was pre-SEA in their schools and those who had taught in other areas previously, or who were new teachers, coming to Southeast at some time during the Experimental Schools Program. That ratio was ten pre-SEA teachers and nine others.)

The ethnographies and structured interviews were not the only sources of data. Four interviews with teachers at Marshall-University High School were referred to and pertinent information assimilated. Cognitive mapping of Marcy Open School teachers in the spring of 1974 by MET anthropologist Frank Giannotta was also surveyed for information lying within the realm of the interview schedule. Finally, in the spring of 1975, the Teacher Center of SEA conducted an informal survey of SEA staff and pertinent data were utilized.

The teacher study, therefore, is based on the information and data gathered from these five sources: school ethnographies, structured open-ended interviews, additional interviews of secondary personnel, cognitive mapping of Marcy Open School staff, and the 1975 Teacher Center survey. The emphasis, however, has been on the data that has been personally gathered.

C. Data Analysis

Educational Background

The initial section of the interview schedule explored the educational background and teaching experience of the subjects. Of the nineteen teachers surveyed, eleven were from Minnesota and fifteen of the nineteen were natives of Midwest States (Figure 8).

At first glance, the University of Minnesota, Minneapolis campus, would seem to be an influential factor as seventeen teachers interviewed had attended the University at some time in their academic careers. Of those seventeen, however, six had also attended a college or university out of the state, and six had attended another college or university within the state, leaving five teachers who were exclusively products of the Minneapolis campus of the University of Minnesota (Figure 9).

Two secondary and five elementary teachers hold MA degrees with an additional MA and PhD in progress. Five of the seven advanced degrees were granted by schools other than the University of Minnesota.

Figure 8 : State of Origin

Midwest:	Minnesota	11
	Wisconsin	2
	South Dakota	1
	Nebraska	1
	Illinois	1
Other:	Pennsylvania	1
	New York	1
	California	1

Figure 9 : Education

		U of MN Mpls.	Other In-state	Other Out-of-state
Marcy	A*	X		X
	B*	X		
	C	X		X
	D	X		
Pratt	A*			X
	B	X	X	
	C	X		X
Tuttle	A*			X
	B*	X	X	
	C	X		
	D*	X	X	
Free School	A	X		X
	B	X		
	C	X		
MUH	A*	X	X	
	B	X	X	
	C	X	X	X
	D	X	X	X
	E*		X	

*These teachers have earned higher degrees.

Teaching Background

Concerning the second question on teaching background, fourteen of the teachers had experience in more than one school. Of the remaining five, four were teachers new to the profession and SEA schools were their first teaching assignments after student teaching.

There are some cross-alternative differences in teaching background. Six of the seven teachers interviewed at Marcy Open School and Pratt Continuous Progress School had previously been involved in alternative teaching techniques, as resource teachers, or been an aide in the SEA alternative where s/he now taught. Three had been involved in team teaching and one had taught multiple grades in one room in a country school. The teachers from Tuttle Contemporary School cumulatively had seventy-eight years of teaching experience (spring 1975). That experience had all been gained, however, in traditional elementary schools.

Of the three teachers interviewed at the Free School, one had previous experience teaching in an alternative school and two were new to teaching. The five teachers at Marshall-University High were divided by grade levels with the three senior high (9-12) teachers having only traditional teaching background, and the two middle school (6-8) teachers both having had previous experience within SEA elementary schools.

Reasons for Teaching in an Alternative

Questions three through eleven of the interview schedule were designed to explore teachers' perceptions of teaching in an alternative. Twelve of

the nineteen expressed a desire to teach in an alternative and had either stayed at their school as it became an alternative, or transferred into SEA aware of the Experimental Schools Program. Five pre-SEA teachers of Southeast schools stated that familiarity with building and staff were a consideration. Six of the ten pre-SEA teachers expressed knowledge of a choice on their part to opt out of the alternatives at the inauguration of the Experimental Schools Program. Four of these six stated among other reasons that they stayed because they wanted the opportunity of teaching in an alternative. The two who stayed exclusively for other reasons were both senior high teachers.

Preparation for Teaching in an Alternative

The responses concerning preparation for teaching in an alternative were varied. The four Marcy Open School teachers cited their previous teaching experience and education as factors, as well as learning by doing. Pratt Continuous Progress teachers (3) also cited their experience and learning by doing plus the utilization of colleagues' abilities and ideas. Pre-SEA teachers at Tuttle (3) remembered meetings about changes in the reading program and record-keeping. The one teacher who had come to Tuttle after SEA began said there was no inservice training and that she has learned by doing. The three Free School teachers said previous teaching experience was a help, but "learning by doing is what Free School is all about."

Marshall-University High teachers again split into middle and senior high groups, with the senior high teachers stating that there was no preparation for teaching in an alternative--only changes in curriculum and organization. The middle school teachers had taught, visited and aided in other alternative schools.

Differences in Teaching

When asked about the differences between teaching in alternative and non-alternative settings, some broad major themes appear to be shared by the elementary schools, Free School, and the middle school of MUH: (1) less structure in time and space, (2) more interaction with staff and other adults, and (3) more individualized involvement with students. Each of these themes has differences in degree across schools. The looseness of time and space is greater in Free School where teachers said it made "planned" activities difficult at times and tended to put pressure on teachers to be flexible. Marcy Open School teachers saw their alternative as having less structured time, with students more responsible and in greater control of how time is used.

Pratt Continuous Progress School and Tuttle Contemporary School teachers saw time as flexibility within the schedule to allow interest area time. As a result, however, a tighter personal time schedule became necessary to assure that students would be ready to pass to those interest areas. This requires team effort and contributes to the increased interaction of staff in their respective schools. Marcy and Free School students pass more freely as individuals with less adherence to a schedule.

The Continuous Progress middle school teacher saw much similarity in time and space arrangements with her move from Pratt to MUH. Mornings were devoted to core subjects (English, social studies, math, science) and afternoons saw students going out into the entire building for their electives or interest areas.

The open middle school teacher saw more restriction at MUH due to the need to coordinate with the existing organization of time and space. Within the open classroom, per se, the Marcy model prevailed.

Interaction with staff and other adults also seemed to vary among the schools. Marcy teachers were effusive in their replies. They stated that teachers in the open school were empathetic, friendly, supportive. This was a great change in teaching climate for one teacher who had covertly experimented (with her principal's approval) with open education behind closed doors in a traditional elementary school. She had subsequently had to endure the hostility of other teachers in the building.

The size of staff was a factor that another Marcy teacher cited. The smallness allowed for interaction daily with teachers, aides and volunteers.

Pratt teachers verbalized less in their answers in this area. They stated that there was more communication than there had been in pre-SEA Pratt. That communication was tied to meetings for the original changes at the inauguration of SEA and the need to work together in their tight time schedule.

Tuttle staff said that there was more candor on the part of teachers now. They communicated more openly than previously. The responsibility for this was partially placed on the Human Relations Training which began city-wide in Minneapolis in 1972.[1]

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[1]Release time for teachers on Tuesday afternoons has been used, among other things, to improve personal and group interaction among administration, staff, and community persons. The manner in which this is done is developed at the building level.

The Free School response was mixed. "Surface friendliness" was present, according to one teacher, but real communication seemed to be a problem. Human Relations Training was cited here also as focusing in the beginning on teachers' personal lives and then moving into the area of definition of the school and its goals. The latter emphasis had divided staff.

Marshall-University High teachers again partitioned along senior/middle school lines. The senior high teachers all looked back to a more tranquil pre-merger SEA time when interaction was more relaxed and pleasant. They felt that changes due to the merger in SEA had affected their interaction, by creating a larger, less cohesive staff.

The middle school teachers, in contrast, perceived their staff interaction as friendlier and more supportive. One teacher said that the support of the staff allowed for experimentation and, if that resulted in failure, the reassurance and encouragement of staff to try something else. The freedom to take risks and the high trust level supporting that freedom acted as an equalizer of both new and experienced teachers. In many ways, teaching in an alternative was "a new ball game" for all of them. (These observations were based primarily on this teacher's earlier elementary school experience in SEA.)

More individualized involvement with students was the third area many teachers included in the difference between teaching in a non-alternative and alternative school. Senior high and Tuttle teachers were the exception. Tuttle teachers alluded to the fact that more children get involved in the learning process now, but they saw little difference in their present methods

of teaching and how they had taught in the past. Senior high teachers mentioned students as greater discipline problems than previously. One teacher stated that he now taught a narrower range of students as the SEA-developed programs at the senior high level, e.g., AWARE, OCLE, siphoned off, with their inter-disciplinary approach, students he would usually teach.

Marcy, Pratt, Free School and MUH middle school teachers gave emphasis to a child-centered approach to teaching, leading to a change in the climate of the classroom. At Marcy, according to one teacher, the child comes first, is recognized as a human being and can develop his own relationship with the teacher. Sensitivity to and treatment of the students as adults had led to children responding more easily to rules, reducing tension and resulting behavior problems. With all the time demands, teachers at Marcy feel they have more time for individuals than they did as traditional classroom teachers.

Pratt teachers stated that they now had the opportunity to relate to many more students than in the traditional classroom. Interest areas bring a turn-over of students as children are given a choice of what they will partake.

The teachers at Free School saw the one to one approach as developing closer rapport with students and obtaining more concrete results. Stimulating learning was easier from this personal base.

Middle school teachers felt that kids were happier and they enjoyed a close relationship with them. What happened in the classroom was allowed to happen, but was not necessarily caused by teacher direction.

Time Demands

Time has already been singled out as an important theme throughout this study. When asked about demands on time, teachers were almost unanimous in stating that teaching in an alternative school involves more time, especially in the area of planning meetings and staff development.

Participation in decision-making was cited as co-opting time by Marcy, Tuttle and Free School teachers. Teachers from these same schools also said that it took time to organize and prepare for dealing with other adults. These included aides, parent volunteers and community participants in governance.

Staff at Marcy, Tuttle and MUH specified student evaluation record-keeping and paper work associated with SEA as additional time consumers. Marcy teachers in conjunction with Free School and Pratt defined curriculum development and attending to the individual needs of students in their classes as taking more time than traditional teaching styles.

Administrative Expectations

Closely tied to the replies on time demands were the replies on changes in the administration's expectations of teachers.

As shown in Figure 10, those expectations have changed in five major areas, i.e., A, B, D, E, F. Four of these areas are tied to time demands involving adult-centered activities and three involve time outside the classroom.

Figure 10: Administrator Expectations of Teachers

	Marcy	Pratt	Tuttle	Free School	MUH
Management of aides, etc.	X	X	X	X	X
Decision-making	X		X	X	X
Record-keeping, paperwork	X				
Planning and staff meetings	X	X	X	X	X
Discipline			X		
Autonomy		X	X	X	X
Governance-community liaison	X	X	X	X	X

Figure 11: Contact with Parents

			More	Less	No Change
Marcy	A		X		
	B		X		
	C		X		
	D		X		
Pratt	A		X		
	B		X		
	C		X		
Tuttle	A		X		
	B				X
	C		X		
	D		X		
Free School	A		X		
	B		X		
	C	(no comment)			
MUH	A				X
	B				X
	C			X	
	D		X		
	E		X		

Contact with Parents

Refining the contact and interaction with other adults still further, the teachers were asked about changes in their contact with parents (Figure 11). A majority stated that they did have more contact. (Three teachers who said that there were no changes or less contact were MUH senior high staff.) That increase was attributed to more organized parent/teacher conferences, parent volunteers in the schools, participation with parents on governance boards and visits to the alternative schools by parents involved in making a choice of learning mode for their child. The results of that contact were positive. Teachers perceived it as improving teacher/parent relations through better understanding on the part of parents of what teaching is all about. Volunteers in the classroom get first-hand knowledge and those volunteers become more supportive of the teachers.

Teachers also benefit from a better understanding of their students, i.e., "where they're coming from." This becomes a positive factor for students and teachers who find their interpersonal relations improved.

Personal Feelings About Teaching

In asking teachers about their personal feelings concerning teaching in an alternative, the minus or negative factors were universal and could be summed up in two words: time and fatigue. Reflecting back to the areas of time demands and administrative expectations, it is noted that most of these are related to time with adults or in solitary record-keeping. Teachers reinforced this observation by stating that they were fatigued by time demands outside the classroom and wanted to spend more time teaching.

Interaction with students was also cited as a drain physically. Movement, noise, individual programs and relating on a one to one basis with thirty or more students is fatiguing. But, with only one exception, these same teachers said that the minus factors were far outweighed by the pluses.

The plus or positive factors varied from school to school in particulars. However, autonomy to be creative was emphasized again and again. At Marcy that creativity was linked to teaming and drawing from the creative talents of teachers and other adults. At Tuttle, the availability of materials was the added dimension!

Another plus across schools was the personal growth factor. Teachers expressed it as expanded positive affect, being allowed to be one's self, education being opened up by the process of sharing with other teachers and administrators and being able to build a more relaxed, natural relationship with students.

Looking closer at the improved relationship of teachers and students, this was a positive response at all schools except Tuttle Contemporary School. Teachers at Tuttle touched on student/teacher relations by lauding creativity for teachers and students and citing their personal enjoyment about children creating. In contrast, teachers at the other schools expressed getting to know the student personally, having a close-knit feeling with the class, being able to respond to students' needs and the warm feelings that develop when children are treated like people.

Freedom was a key word--freedom to be flexible with time, space, and curriculum--freedom to step out of the teacher role and be one's self.

Comparisons and Contrasts

Dan Lortie's recent book, Schoolteachers, is a sociological study of teachers based on data gathered in 1963 and 1964 in traditional urban schools in the Boston and Miami areas. Teachers, Lortie says, are predominantly female, middle-class, and conservative in their outlook. The limited demands that the profession makes on their time reinforces a disinterest in change (1975:54). Often inadequately prepared in college for the realities of the classroom, teachers make it by the "sink or swim" method (characterized by SEA teachers as "learning by doing"). They harken back to their years as students for former teachers as models to follow or arbitrarily adopt successful practices of fellow teachers. Their struggle is endured in private, reinforcing an individualism that isolates them from one another (1975:81-96). (They are, after all, supposed to be professionals, not poor souls groping in the dark for teaching tools, confidence, and the ability to maintain order in the classroom.)

Hampered by weak career incentives, teachers lean heavily on what Lortie terms psychic rewards or subjective valuations made by the individual during the course of the work day (1975:101). (Eric Berne would call them "strokes.") The fulfillment of psychic rewards is described as sporadic, contributing to feelings of uncertainty about their proficiency as teachers. When asked what changes they would like, their answers stressed smaller classes and less organizational duties. They refrained from asking for full autonomy and official independence. Lortie sees as ambivalence here that is linked to the uncertainty of being able to produce predictable results if given more control over the situation (1975:186). Thus, teachers bow to the system upon which they are economically and functionally dependent, and in which there is a

modicum of security because it is known. They ask for a little more or a little less of the same.

Lortie cited teachers as ranking interpersonal relations as the highest of their qualifications for teaching (1975:39). Let us examine first those interpersonal relations as regards adults they deal with as teachers: (1) Parents can be a great deal of trouble at their worst and should keep their distance at best. A "good parent" is one who does not intervene and who supports the teacher's efforts, a kind of "distant assistant" (1975:190-91). (2) Teacher/teacher relations are complex. Teachers are covetous of their psychic rewards and do not want their territory intruded upon by another teacher. Yet, they may look to colleagues for support and technical knowledge. The degree of cooperation among teachers is varied, an individual choice (1975: 192-96). (3) Teachers accept the authority of the principal, but they want to direct how that affects them. To them, the principal's role should serve teachers' interests, buffer parents, deal with problem students and see that all teachers do their share of organizational duties. They are willing to defer to the principal in return for working conditions that are favorable to their classroom goals (1975:192-200).

As regards students, the teacher's role of leadership, according to Lortie, charges them with maintaining order while compelling students to get their work done and somehow arouse and hold the students' interest in that work (1975:152). In the traditional self-contained classroom, it is not difficult to see that the desire for interpersonal relations is jeopardized by a high percentage of the teacher's time being committed to maintenance. This preoccupation with maintenance, I would venture, is in direct conflict with the psychic rewards they so need.

Set up by circumstances to become isolationists in their self-contained classrooms, teachers find their interpersonal relations defensive and unfulfilling. An SEA teacher who exchanged classrooms for a few days with a teacher from one of the traditional schools in Minneapolis had a reaction that illustrates. When she entered the teachers' room all she heard were complaints--complaints about administration, students, parents and other teachers. The SEA teacher found it oppressive.

It would seem that there are some similarities, but also some sharp contrasts between the traditional teachers depicted in Schoolteacher and the SEA teachers interviewed. (The majority of the following observations will be based on SEA teachers from Marcy, Pratt, Free School and the middle school of Marshall University High, as Tuttle and senior high teachers most closely resemble Lortie's traditional schoolteachers.)

Southeast Alternatives has made extensive time demands on teachers. Those demands were part of the price for remaining at their pre-SEA school or being able to enter SEA schools and have the opportunity to teach in the Experimental Schools Program. The rewards for that time invested have been great. Teachers have found that they are able to effect change, to give it direction, to discover themselves important (in varying degrees) to decision-making. They have entered into active involvement in the change process.

The isolation of the classroom has been replaced with necessary cooperation with other teachers and adults. This has been due to the work load, scheduling and changes in the way learning takes place. Teachers have found the stimulation, the sharing and the support of other adults a great personal reward, a contribution to their personal growth.

There was much uncertainty and the anxiety that accompanied that uncertainty in the first couple of years of SEA. With the fredom to experiment and the maturity to fail and try something else, there has developed an expertise, an ability to cope with change that tends to dispel anxiety. That has only been possible in an accepting environment created by all those involved. Smaller class sizes and more time in the classroom are still the hue and cry, but not at the expense of those gains held so dear: autonomy and personal growth.

I would like to close this section with a quote from Carl Rogers on motivation for change because after talking with these nineteen men and women, I feel that he is describing what has occurred in varying degrees to the majority of them.

> Gradually my experience has forced me to conclude that the individual has within himself the capacity and the tendency, latent if not evident, to move forward toward maturity. In a suitable psychological climate this tendency is released and becomes actual rather than potential. It is evident in the capacity of the individual to understand those aspects of his life and of himself which are causing him pain and dissatisfaction, an understanding which probes beneath his conscious knowledge of himself into those experiences which he has hidden from himself because of their threatening nature. It shows itself in the tendency to reorganize his personality and his relationship to life in ways which are regarded as more mature... It is the urge which is evident in all organic and human life—to expand, extend, become autonomous, develop, mature—the tendency to express and activate all the capacities of the organism, to the extent that such activation enhances the organism or the self. This tendency may become deeply buried under layer after layer of encrusted psychological defenses; it may be hidden behind elaborate façades which deny its existence; but it is my belief that it exists in every individual, and awaits only the proper conditions to be released and expressed (1961:35).

D. Epilogue

With an increasing interest in alternative schools, administrators and teachers in many sections of the United States and foreign countries are looking more closely at just what it takes to implement alternatives. I would like to address those interested and attempt to give some insight as to the qualifications and environment needed for teachers, based on the interviews and other data gathered.

Some teaching experience for the prospective staff prior to launching into one of the alternatives is suggested as there is much to be said for just knowing what to expect from five year-olds or ten year-olds, especially if cross-age teaching is included. Those SEA teachers who had aided in an alternative before having the full responsibility of a classroom also found this experience helpful. Such an opportunity is rarely available, however, in areas just beginning to offer choices in education.

Superintendents and principals should hold out for an entire school housing one alternative if at all possible. Teachers find it difficult to achieve the harmony and cooperation that becomes necessary to successfully implement their program when they must also deal with teachers immersed in a different teaching philosophy. It is not exactly the "mine is better than yours" syndrome, but the time and effort demanded in setting up, for example, an open school involves commitment and dedication that often borders on intolerance of other alternatives. Group cohesion is essential. Teaching styles may vary within an open school, but group cohesiveness affords the support and cooperation needed to provide "psychic rewards" and/or boost morale. The first two years are the hardest, according to SEA teachers, and everyone needs all the support and cooperation available.

If it is not possible to have a school dedicated to only one alternative, then there should be special effort made by administrators to work with teachers to reduce their prejudice and prevent jealousies by doling out materials, monies, opportunities and responsibilities in equal amounts.

Matching the principal and the teachers to the alternative educational mode in which they can best function is also a prerequisite. This may mean shifting teachers and administrators within the district. The initial outcry will, however, be offset by the degree of comfort experienced in a working environment in which staff is compatible. That flexibility in staffing must be built-in to the program. At Marcy Open School, teachers and parents as well as the principal interview and contribute to the decision on new personnel through the Marcy Council (Giannotta, 1975). The only time this policy was not followed, the newly-hired teacher left after a few months. She was incompatible with open education.

A clue to look for in staffing a non-traditional alternative are teachers who have always been looking for a better way to teach. They are the seekers; the individuals who are actively involved within the school, and often outside of it also. Teachers will find themselves in a new role as facilitators of learning in a child-centered environment rather than teachers of information in a teacher-centered environment. Those individuals who can cope and grow with change will thrive.

It is also important to set up ways in which communication, staff development and staff participation in decision-making are meaningful. This also contributes to the cohesion of the staff and it builds towards the thrusting relationship among staff and between staff and administrators that is so vital.

That trust is essential to free teachers to realize their creative potential in the classroom. It also contributes to an environment in which genuine sharing and caring can develop and grow.

In conclusion, there is one characteristic that is essential for the establishment of a classroom climate that affords optimum opportunity for learning to take place. That characteristic embodies a realness that radiates caring and acceptance of students as individuals. As one teacher phrased it, "It is the relationship between the children and the teacher that really counts."

PART IV: COMPARATIVE SCHOOL CULTURE

A. Introduction

The comparative school culture substudy is intended as an outgrowth of the school ethnographic studies, to systematically test some propositions suggested by the latter. The several ethnographies report upon various activities which occur in the five alternatives. These activities are comparable in that some are found in more than one, or all, of the alternatives, while others appear to be distinctive of one or another alternative. The ethnographies, however, needed to be supplemented by "hard" data on how these activities are perceived across schools--that is, by numerically comparative results. Therefore, research was initiated during the 1974-1975 school year to systematically compare schools in these dimensions. Comparative school culture is intended as a design for continuing, analyzing and reporting results of this research.

It is a discrete study addressing specific anthropological questions in a formal analytic framework. Unlike the School Ethnographic Studies, it seeks to compare and contrast the same set of data elements within and between the several school cultures in SEA. An inductively-based model is developed which draws its basic data categories from participants in the culture; data output utilizes both qualitative and quantitative analysis.

In its relation to the overall design of the ESG project, Comparative School Culture intersects the areas of 'school culture' and 'student culture'

delineated in the MET general methodology statement (Nelson and Giannotta, 1974:vii-ix). It covers a discrete subject matter (see Rationale, below), across three key categories of school participants--kids, teachers and principals--and across the four elementary alternatives in SEA.

B. Objective

The general objective of this substudy is to examine the convergence and divergence of beliefs, values and symbols across the several subcultural units comprising the SEA schools. Because a discrete study cannot address all aspects of belief, value and symbol, the following criteria were defined to meet this objective.

1) The primary subject matter (i.e., the variable selected for examination) should be a natural cognitive domain (see Nelson and Giannotta, 1974:57) among all segments of the culture.

2) The method of acquiring data should be inductive, which implies:

3) That basic categories be drawn from participants in the culture.

The area of inquiry selected for study is one which can be viewed behaviorally--and indeed has been in the observations reported in Part II, above, and in the School Ethnographic Studies. Yet this study examines perceptions rather than behavior. The question to be addressed is "what do people do in school?" Framed in more specific terms, the key research question is "what does a specific category of participant (kids) perceive that people do in school in the several alternatives?"

C. Rationale

The comparative school culture study is predicated on a 'cognitive' concept of culture (cf., Tyler, 1969:3). In addressing the question "what do people do in school?," we can distinguish between operational and cognitive aspects of culture. Operational aspects are the things that people can be observed to be doing--that is, the overt behavior of participants in the culture. Cognitive aspects consist of the things participants need to know in order to function in the culture's social and physical environment (cf., Haugen, 1969). Several assumptions are presupposed by a cognitive concept:

1) culture is a mental phenomenon (Wallace, 1961);

2) culture is complementary rather than shared among all members (Wallace, 1961);

3) behavior is an artifact of culture (Goodenough, 1971:19);

4) discrepancies may be expected between cognitive reality and operational reality (cf., Wallace, 1965).

D. Substantive Research Questions

The intent of Comparative School Culture is to examine a segment of culture (i.e., "what people do") comparatively across several semi-discrete subgroups--the four alternatives and the three role groups, kids, teachers and principals. Accordingly, substantive questions addressed to the data should ask how these subgroups differ and how they are alike. For control purposes, it is also possible to compare each and all of them to analog subgroups outside of the SEA schools; for this purpose a graded, self-contained, essentially 'traditional' elementary school is used as a comparison site. Substantive questions can then also address similarities and differences

between the alternatives and the outside school. Questions 1-4 below address within-SEA comparisons and contrasts; questions 5-8 compare SEA schools with the external control site:

1. What are significant variables characterizing the culture of a school?
2. How are teachers' roles perceived by students?
3. How are principals' roles perceived by students?
4. Are alternatives more alike than they are different, or vice versa?
5. Are there characteristics which distinguish SEA schools from non-alternative schools? What are they?
6. Are some SEA schools more like non-SEA schools than others? Which? In what way?
7. Are SEA schools more like one another than like non-SEA schools? How?
8. Are there universals in school culture?

More specific questions can be addressed by using a student-generated taxonomy of culture traits ("things people do") and performing a componential analysis (Goodenough, 1956) of this taxonomy. A more general interrogative format for this sort of analysis seeks to identify what elements of culture are shared and complementary between the several subgroups. For example:

1. What are:
   a) components of culture shared among all alternatives?
   b) components of culture distinctive of specific alternatives?
   c) components of culture shared between two or more, but not all, alternatives?
2. What are:
   a) components of culture shared between all SEA schools and other schools? One or more SEA schools and others?
   b) components of culture distinctive of SEA schools?
   c) components of culture distinctive of non-SEA schools (comparison site)?

E. Hypotheses

A systematic way of addressing questions of similarity and difference is to pose a series of formal hypotheses to which the data can provide confirmation or disconfirmation. For analytic purposes, the following hypotheses are proposed:

1) SEA schools are more like one another than they are different.

As stated in Part I, a central theme of the concept of alternatives is difference. Providing alternatives implies providing different types or models of schooling, or that experiences will differ substantially in process, content, or both. Yet the SEA schools share with other city schools a great deal. All have established formal roles--teachers, principals, aides, students, etc.; all have formally mandated rules, expectations and financial stipulations. All are subject to the constraints and expectations of the society's dominant value structure concerning the role of student, public employee, and 'school' as an institution within the community. Some SEA schools (e.g., Free School) may stretch these formal criteria in some ways and the variance within SEA may be substantially greater than among non-SEA schools; yet we have posited that the similarities outweigh the differences.

2) A "continuum" exists with the Free School and the Contemporary School at opposite ends, e.g.:

Free ◄—► Open ◄—► Continuous Progress ◄—► Contemporary

The continuum, while nowhere stated in the formal doctrine of the SEA Project, has been widely subscribed to by Project personnel, community residents, evaluation team members, and NIE Experimental Schools staff.

3) The Contemporary School option resembles most closely "traditional" schools.

This proposition is a corollary of the continuum hypothesis. It is widely believed that the contemporary school is meant to be "traditional," and, indeed, it is often referred to verbally and in print as "the traditional alternative."

4) The Free School is the most 'far out' or radical of the SEA alternatives.

Likewise a corollary of the continuum hypothesis, this hypothesis is predicated upon the Free School's self-asserted goal of providing a radical choice for SEA students, as well as the SEA formal doctrine which mandates the Free School a role of experiential learning in an "unstructured" environment.

5) The SEA schools form a discrete unit in contrast to outside schools.

SEA has experienced four years of survival as a quasi-independent entity within the administrative structure of the Minneapolis Public Schools. The Project has fostered a series of enrichment activities and cross-school consultantships (e.g., 'Cadre', resource teachers, Level I evaluation); thus SEA schools should show something in common distinguishing them from others.

F. Data Collection

The data collection procedure for this substudy involved a Delphi-type survey. First, students in the four elementary alternatives of SEA plus the comparison site, Audubon School, were asked to provide written information on things people do at school. In each of the SEA schools, except Free School,

a sample of 60-70 intermediate students were asked to respond. Because of its small enrollment and poor attendance the Free School's sample amounted to fifteen students. At Audubon, all intermediate students were polled. Each student was given a packet of twenty 3x5 index cards. On each of ten white cards students were asked to write one thing which kids do at school. On each of five pink cards, they were asked to write one thing that teachers do at school, and on each of five green cards they were asked to write one thing that the principal does at school. Activities listed were compiled into lists for each school and numbered. Using a table of random numbers, an equal number of activities were drawn from each school list. This produced a questionnaire with 100 items—50 things which kids do at school, 25 things which teachers do at school, and 25 things which the principal does at school. The resulting questionnaire (Appendix H) was then taken back to the five schools, and administered to intermediate-level classes. At the Free School, students in the appropriate age brackets were located and asked to respond individually.

The response mode of the questionnaire was a forced-choice positive or negative format (e.g., At your school do teachers.....? Yes___ No__). The only difficulties encountered in administration were student questions about (1) the meanings of a few terms (e.g., "math bees"); and (2) what to do if an answer was partially correct. In the former case, the term(s) were explained or defined. In the latter, students were asked to make their best judgment or else to leave the item blank. In analysis, ambiguous responses (such as both "Yes" and "No" checked) were coded as no information.

G. Data Analysis

Questionnaire results were key-punched and analyzed item by item using a two-way cross tabulation routine which compared the five schools' responses. A Chi-square test was applied to each item to determine whether differences between responses were significant. The Chi-square turned out to be too powerful, showing significant differences at the .05 level even where all schools were strongly positive in response to a particular question.

Two additional routines were performed on the data gathered by the cross-tabulation: (1) to determine the extent of differences among the schools in their response patterns, deviations in responses to each item were calculated between all possible pairs of schools (e.g., Tuttle-Pratt, Marcy-Audubon, etc.). These were then summed and divided by the number of items to produce an average deviation between each pair of schools:

Figure 12: Deviations in positive response frequencies between pairs of schools

		Average Deviation
Most Similar ⟶	Tuttle ⟷ Pratt	7.57
	Marcy ⟷ Pratt	8.58
	Tuttle ⟷ Audubon	8.82
	Tuttle ⟷ Marcy	9.40
	Pratt ⟷ Audubon	11.03
	Marcy ⟷ Free	13.73
	Marcy ⟷ Audubon	14.35
	Tuttle ⟷ Free	14.36
	Pratt ⟷ Free	15.87
Least Similar ⟶	Free ⟷ Audubon	16.91

(2) to address the content of differences and similarities, positive and negative response frequencies were arranged in matrices which could be analyzed using set theory. Because responses to the questionnaire were heavily weighted on the positive side, this analysis was performed at both 50% and 75% positive response levels (that is, at least 50% of respondents answering affirmatively, or 75% of respondents answering affirmatively). Figures 13 and 14 represent the matrices of response frequencies.

Figure 13: Comparative School Culture Responses

Items 1-50: At your school do kids:	+ = at least 50% positive response level				
	Tuttle	Marcy	Pratt	Free	Audubon
1. sass?	+	+	+	+	+
2. go to gym?	+	+	+	+	+
3. go to band?	+	+	+	+	+
4. go to the store?	+	+	-	+	+
5. write?	+	+	+	+	+
6. go to photo lab?	+	-	+	+	-
7. go to woodworking?	+	+	+	+	-
8. paint?	+	+	+	+	+
9. do reading?	+	+	+	+	+
10. have fun?	+	+	+	+	+
11. sit?	+	+	+	+	+
12. have tables?	+	+	+	+	+
13. have math bees?	-	+	-	-	-
14. get bored?	+	+	+	+	+
15. eat lunch?	+	+	+	+	+
16. hit?	+	+	+	+	+
17. play four square?	+	+	+	+	+
18. play games?	+	+	+	+	+
19. do math once a year?	-	-	-	+	-
20. plant things?	+	+	+	+	+
21. play baseball?	+	+	+	+	+
22. go to the library?	+	+	+	+	+
23. sometimes be quiet?	+	+	+	+	+
24. get mad at the teachers?	+	+	+	+	+
25. listen most of the time?	+	+	+	+	+

Figure 13: Comparative School Culture Responses (continued)

At your school do kids:	+ = at least 50% positive response level				
	Tuttle	Marcy	Pratt	Free	Audubon
26. have free time?	+	+	+	+	+
27. build things?	+	+	+	+	+
28. type?	+	+	+	+	-
29. play?	+	+	+	+	+
30. spell?	+	+	+	+	+
31. bitch at other kids?	+	+	+	+	+
32. do art?	+	+	+	+	+
33. play kickball?	+	+	+	+	+
34. go in the lounge and smoke?	-	-	-	+	-
35. goof off?	+	+	+	+	+
36. slave?	+	-	-	-	+
37. go to the bathroom?	+	+	+	+	+
38. play volleyball?	+	+	+	+	-
39. do science?	+	+	+	+	+
40. teach each other?	+	+	+	+	+
41. wreck things?	+	+	+	+	+
42. run?	+	+	+	+	+
43. write stories?	+	+	+	+	+
44. watch video tapes?	+	+	+	+	-
45. have to put up with a bonehead?	+	+	+	+	+
46. steal?	+	+	+	+	+
47. do social studies?	+	+	+	+	+
48. have "groups"?	+	+	+	+	+
49. make kites?	-	+	+	+	-
50. talk?	+	+	+	+	+

Figure 13: Comparative School Culture Responses (continued)

Items 51-75: At your school do teachers:	+ = at least 50% positive response level				
	Tuttle	Marcy	Pratt	Free	Audubon
51. take students to the principal?	+	+	+	+	+
52. read books to you?	+	+	+	+	+
53. sit at their desks?	+	+	+	-	+
54. teach science?	+	+	+	+	+
55. watch?	+	+	+	+	+
56. play games with students?	+	+	+	+	-
57. help you to learn?	+	+	+	+	+
58. act bossy?	+	+	+	+	+
59. take kids places?	+	+	+	+	+
60. talk to the other teachers?	+	+	+	+	+
61. read?	+	+	+	+	+
62. work?	+	+	+	+	+
63. go outside?	+	+	+	+	+
64. teach people to make hammocks?	-	-	-	+	-
65. teach you new math games?	+	+	+	+	+
66. drink coffee?	+	+	+	+	+
67. teach?	+	+	+	+	+
68. have meetings?	+	+	+	+	+
69. break up fights?	+	+	+	+	+
70. write?	+	+	+	+	+
71. get tired of working from dawn till dusk?	+	+	+	+	+
72. walk kids to gym?	+	-	+	-	+
73. help you to learn about this school?	+	+	+	+	+
74. bitch?	+	+	+	+	+
75. get their jollies?	+	+	+	+	+

Figure 13: Comparative School Culture Responses (continued)

Items 76-100: At your school does the principal?	+ = at least 50% positive response level				
	Tuttle	Marcy	Pratt	Free	Audubon
76. give orders to kids?	+	+	+	+	+
77. have aide meetings?	+	+	+	+	+
78. check up on things?	+	+	+	+	+
79. bawl people out?	+	+	+	+	+
80. keep order?	+	+	+	+	+
81. talk?	+	+	+	+	+
82. go swimming with you?	-	-	+	-	-
83. work with kids?	+	+	+	+	+
84. do business?	+	+	+	+	+
85. come in the classroom to talk to the kids?	+	+	+	+	+
86. have meetings?	+	+	+	+	+
87. fill out forms?	+	+	+	+	+
88. talk to kids in the office?	+	+	+	+	+
89. sit in the office and talk on the telephone all day?	-	-	-	+	-
90. check the rooms?	+	+	+	-	+
91. make rules?	+	+	+	+	+
92. teach?	+	+	+	+	+
93. lead the school?	+	+	+	-	+
94. make phone calls?	+	+	+	+	+
95. suspend kids?	+	+	+	+	+
96. drink coffee?	+	+	+	+	+
97. keep things going?	+	+	+	+	+
98. OK (approve) things?	+	+	+	+	+
99. do nothing?	-	-	-	+	-
100. act mean?	+	-	+	+	-
SUMMARY: Positive	92	90	92	93	85
Negative	8	10	8	7	15

Figure 14: Comparative School Culture Responses

Items 1-50: At your school do kids:	+ = at least 75% positive response level				
	Tuttle	Marcy	Pratt	Free	Audubon
1. sass?	+	+	+	+	+
2. go to gym?	+	+	+	+	+
3. go to band?	+	+	+	+	+
4. go to the store?	+	-	-	+	-
5. write?	+	+	+	+	+
6. go to photo lab?	-	-	+	-	-
7. go to woodworking?	+	+	+	+	-
8. paint?	+	+	+	+	+
9. do reading?	+	+	+	+	+
10. have fun?	+	+	+	+	+
11. sit?	+	+	+	+	+
12. have tables?	+	+	+	+	-
13. have math bees?	-	+	-	-	-
14. get bored?	+	-	-	+	+
15. eat lunch?	+	+	+	+	+
16. hit?	+	+	+	+	-
17. play four square?	+	+	+	+	+
18. play games?	+	+	+	+	+
19. do math once a year?	-	-	-	-	-
20. plant things?	+	+	+	-	-
21. play baseball?	+	+	-	+	+
22. go to the library?	+	+	+	-	+
23. sometimes be quiet?	+	+	+	+	+
24. get mad at the teachers?	+	+	+	+	+
25. listen most of the time?	+	-	+	+	-

Figure 14: Comparative School Culture Responses (continued)

At your school do kids:	+ = at least 75% positive response level				
	Tuttle	Marcy	Pratt	Free	Audubon
26. have free time?	+	+	+	+	+
27. build things?	+	+	+	+	-
28. type?	-	+	-	+	-
29. play?	+	+	+	+	+
30. spell?	+	+	+	+	+
31. bitch at other kids?	+	+	+	+	+
32. do art?	+	+	+	+	+
33. play kickball?	+	+	+	+	+
34. go in the lounge and smoke?	-	-	-	+	-
35. goof off?	+	+	+	+	+
36. slave?	-	-	-	-	-
37. go to the bathroom?	+	+	+	+	+
38. play voleyball?	+	+	-	+	-
39. do science?	+	+	+	-	+
40. teach each other?	+	+	+	-	-
41. wreck things?	-	+	+	-	-
42. run?	+	+	+	+	+
43. write stories?	+	+	+	+	+
44. watch video tapes?	+	+	+	+	-
45. have to put up with a bonehead?	+	-	-	+	-
46. steal?	-	-	-	-	-
47. do social studies?	+	+	+	-	+
48. have "group	+	+	+	+	+
49. make kites?	-	+	-	+	-
50. talk?	+	+	+	+	+

Figure 14: Comparative School Culture Responses (continued)

Items 51-75: At your school do teachers:	+ = at least 75% positive response level				
	Tuttle	Marcy	Pratt	Free	Audubon
51. take students to the principal?	+	+	+	-	+
52. read books to you?	+	+	+	-	-
53. sit at their desks?	+	-	+	-	+
54. teach science?	+	+	+	+	+
55. watch?	+	+	+	+	+
56. play games with students?	+	+	+	+	-
57. help you to learn?	+	+	+	+	+
58. act bossy?	-	-	-	+	-
59. take kids places?	+	+	+	+	-
60. talk to the other teachers?	+	+	+	+	+
61. read?	+	+	+	+	+
62. work?	+	+	+	+	+
63. go outside?	+	+	+	+	+
64. teach people to make hammocks?	-	-	-	+	-
65. teach you new math games?	+	+	+	+	-
66. drink coffee?	+	+	+	+	+
67. teach?	+	+	+	+	+
68. have meetings?	+	+	+	+	+
69. break up fights?	+	+	+	+	+
70. write?	+	+	+	+	+
71. get tired of working from dawn till dusk?	+	-	-	+	-
72. walk kids to gym?	+	-	-	-	+
73. help you to learn about this school?	+	+	+	-	-
74. bitch?	-	-	-	+	+
75. get their jollies?	+	+	+	+	-

Figure 14: Comparative School Culture Responses (continued)

Items 76-100: At your school does the principal:	+ = at least 75% positive response level				
	Tuttle	Marcy	Pratt	Free	Audubon
76. give orders to kids?	+	+	+	+	+
77. have aide meetings?	+	+	+	-	+
78. check up on things?	+	+	+	+	+
79. bawl people out?	+	-	+	+	-
80. keep order?	+	+	+	-	+
81. talk?	+	+	+	+	+
82. go swimming with you?	-	-	+	-	-
83. work with kids?	+	+	+	-	-
84. do business?	+	+	+	+	+
85. come in the classroom to talk to the kids?	+	+	+	-	+
86. have meetings?	+	+	+	+	+
87. fill out forms?	+	+	+	+	+
88. talk to kids in the office?	+	+	+	+	+
89. sit in the office and talk on the telephone all day?	-	-	-	+	-
90. check the rooms?	+	+	+	-	+
91. make rules?	+	+	+	+	+
92. teach?	-	-	-	-	-
93. lead the school?	+	+	+	-	+
94. make phone calls?	+	+	+	+	+
95. suspend kids?	+	-	+	-	+
96. drink coffee?	+	+	+	+	+
97. keep things going?	+	+	+	-	+
98. OK (approve) things?	+	+	+	-	+
99. do nothing?	-	-	-	-	-
100. act mean?	-	-	-	-	-
SUMMARY: Positive	83	78	79	71	64
Negative	17	22	21	29	36

Culture-sharing across schools was measured by determining the items representing the intersection of multiple sets. Using the four SEA elementary schools for illustrative purposes, the intersections can be modelled using a Venn diagram:

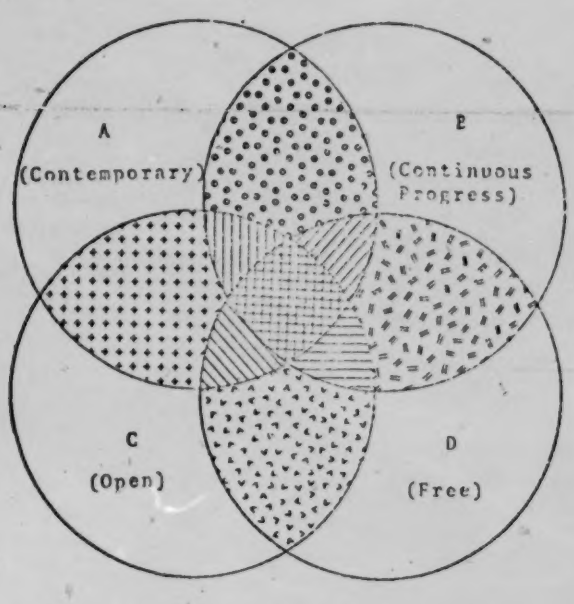


Figure 15: Set-logic model of school culture sharing.

The logical description of culture-sharing among the several SEA schools is outlined in Figure 16. Elements of culture shared among some, but not all, schools will be described by the combination of union and intersection of sets, following the distributive law (Flament, 1963:4). Elements distinctive of only one school (e.g., Free School) will be identified as the difference of intersecting sets; the complement of all distinctive elements (i.e., those distinctive of Contemporary + Continuous Progress + Open + Free) will be identified as the symmetric difference of intersecting sets:

Figure 16: Set-logic Model for Culture-Sharing among SEA Elementary Alternatives (see Figure 15)

	INTERSECTION OF:										
SHARING BETWEEN	$A \cap B \cap C \cap D$	$A \cap B \cap C \cap \bar{D}$	$A \cap B \cap D \cap \bar{C}$	$A \cap C \cap D \cap \bar{B}$	$B \cap C \cap D \cap \bar{A}$	$A \cap B \cap \bar{C} \cap \bar{D}$	$A \cap C \cap \bar{B} \cap \bar{D}$	$A \cap D \cap \bar{C} \cap \bar{B}$	$B \cap C \cap \bar{A} \cap \bar{D}$	$B \cap D \cap \bar{A} \cap \bar{C}$	$C \cap D \cap \bar{A} \cap \bar{B}$
Contemporary Continuous Progress Open Free											
Contemporary Continuous Progress Open											
Contemporary Continuous Progress Free											
Contemporary Open Free											
Continuous Progress Open Free											
Contemporary Continuous Progress											
Contemporary Open											
Contemporary Free								NOT ON DIAGRAM			
Continuous Progress Open									NOT ON DIAGRAM		
Continuous Progress Free											
Open Free											

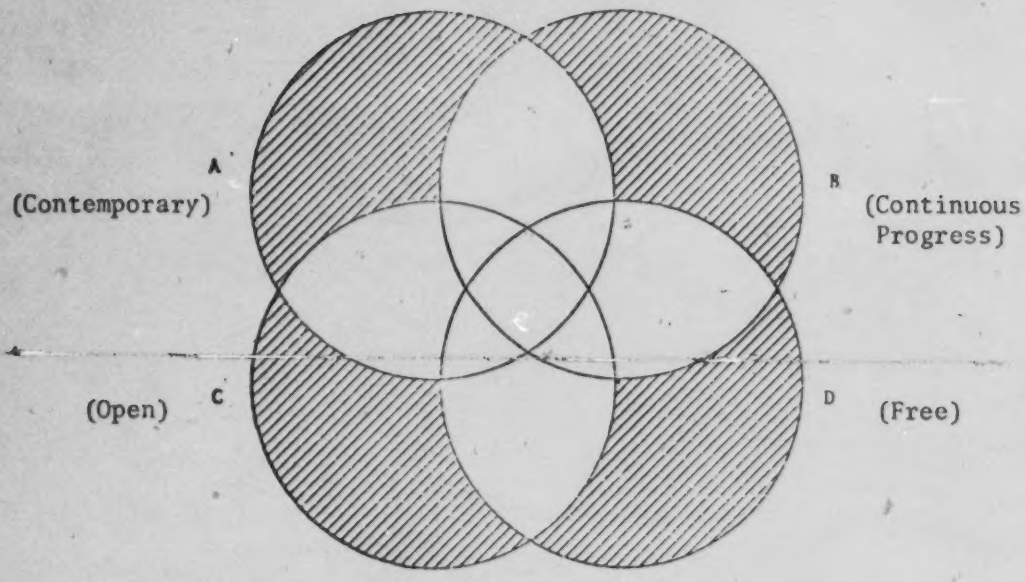


Figure 17: Set-logic model of school culture complementarity.

Using the Venn model (above), the area of intersection between one or more schools would be large if the number of shared culture traits were also large. Similarly, the symmetric difference would be large if there are many traits distinctive of individual schools. In general, the larger the area of intersection between all schools, the more alike are the schools. Conversely, the larger the symmetric difference, the more different are the schools. If an individual school shows more different elements than others, that school is the most different. Set logic thus provides some criteria for assessing degrees of similarity and difference which we can use to address the research questions outlined above.

Figure 18: Intersection Sets of Shared Objectives (50% positive response level)

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Items	1, 2, 3, 5, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 35, 37, 39, 40, 41, 42, 43, 45, 46, 47, 48, 50, 51, 52, 54, 55, 57, 58, 59, 60, 61, 62, 63, 65, 66, 67, 68, 69, 70, 71, 73, 74, 75, 76, 77, 78, 79, 80, 81, 83, 84, 85, 86, 87, 88, 91, 92, 94, 95, 96, 97, 98	7 28 38 44 56	33 90 93	4						6 100	72		49
Totals	79	5	3	1	ø	ø	ø	ø	ø	2	1	ø	1

(continued)

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	M	P	[illegible]	[illegible]
Items							36							13	82	19 34 64 89 99	
Totals	ø	ø	ø	ø	ø	ø	1	ø	ø	ø	ø	ø	ø	1	1	5	ø

Figure 19: Intersection Sets of Shared Objectives (75% positive response level)

	ΠΠΠΠΠΠΠΠΑ	ΠΠΠΠΑ	ΠΠΠΠΑ	ΠΠΠΠΑ	ΠΠΠΠΑ	ΠΠΠΠΑ	ΠΠΠΠ	ΠΠΠΑ	ΠΠΠΑ	ΠΠΠΠ	ΠΠΠΑ	ΠΠΠΑ	ΠΠΠΑ
Items	1, 2, 3, 5, 8, 9, 10, 11, 15, 17, 18, 23, 24, 26, 29, 30, 31, 32, 33, 35, 37, 42, 43, 48, 50, 54, 55, 57, 60, 61, 62, 63, 66, 67, 68, 69, 70, 76, 78, 81, 84, 86, 87, 88, 91, 94, 96	7 12 16 27 44 56 59 65 75	22 30 47 51 77 80 85 90 93 97 98	21			20 40 52 73 83	38		25 79	53 95	14	
Totals	47	9	11	1	∅	∅	5	1	∅	2	2	1	∅

(continued)

	ΠΠΠΠΑ	ΠΠΠΠΑ	ΠΠΠΠΑ	ΠΠΠ	ΠΠΠ	ΠΠΠ	ΠΠΑ	ΠΠΠ	ΠΠΠ	ΠΠΑ	ΠΠΠ	ΠΠΑ	ΠΠΑ	T	Π	P	F	A
Items						40 45 71	72	41	28 49				74		13	6 82	34 58 64 89	
Totals	∅	∅	∅	∅	∅	3	1	1	2	∅	∅	∅	1	∅	1	2	4	∅

Figures 18 (50% positive response level) and 19 (75% positive response level) plot extensional lists of shared questionnaire objectives, which can be interpreted as shared culture content. For purposes of brevity, intersection sets are written with non-intersections absent but understood (e.g., $T \cap M \cap P = T \cap M \cap P \cap \overline{F} \cap \overline{A}$). The initials T, M, P, F, A signify the five elementary schools, Tuttle, Marcy, Pratt, Free, and Audubon. The first column on each figure represents the intersection set of all five schools. The next five columns represent the intersections of four of the five schools; the next ten columns represent intersections of three of five, etc. Finally, the last five columns portray distinctive traits—those characteristics of only one school of the five.

H. Results

The analysis of data in Figures 18 and 19 produces a pattern showing a high degree of culture-sharing among all schools, and particularly among the SEA schools. At the 50 percent positive response level 79 of the 100 objectives were shared by all five schools, and 84 by the four SEA schools. Only the Free School showed a significant number of distinctive traits (5). The 75% positive response level discriminated more clearly between intersection sets; nevertheless, 47 objectives were shared among all five schools, and 56 among the SEA schools. It should be noted, however, that more traits were shared between Tuttle, Marcy, Pratt and Audubon (11), than between Tuttle, Marcy, Pratt and the Free School (9). Furthermore, an additional five items were shared by Tuttle, Marcy and Pratt; thus those three schools answered alike on 72 of the 100 objectives. Again, only the Free School showed many distinctive traits (4).

In addressing the hypotheses listed above, we find:

1) Hypothesis 1 is confirmed. SEA schools are more like one another than they are different. However, this is largely an artifact of the similarity between schools in general; Figure 19 shows that there is as much diversity within SEA as there is between SEA and other schools. Figure 12 suggests greater diversity within SEA, largely because of the Free School.

2) The "continuum" concept is only partially substantiable. It is safe to assert that the Contemporary School and Free School are rather different; but Figure 19 shows that Pratt and Marcy also differ considerably from the Free School. Furthermore Figure 19 shows Tuttle sharing 64 objectives with the Free School, compared to 60 for Marcy and 58 for Pratt. It is noteworthy that Figure 12 shows that the Free and Open alternatives do not resemble one another closely.

3) The Contemporary School resembles the non-SEA school, Audubon, somewhat more closely than do either Marcy or Pratt (Figure 12). Tuttle shares 63 objectives with Audubon, compared to 59 for Marcy and 60 for Pratt (Figure 19); these differences are insignificant.

4) All analyses confirm that the Free School is the most 'different' of the SEA alternatives. Content analysis (see below) suggests that the differences stem in part from radicalism, but partially from student dissatisfaction and partially from differing curricular content.

5) The SEA schools appear to form a discrete unit, except for Free School (Figure 12). Figure 19 further shows Tuttle, Marcy and Pratt sharing 72 objectives, compared to only 56 for the four SEA schools combined. Tuttle,

Pratt and Marcy are more like one another than like Audubon; but more like Audubon than the Free School.

I. Content

The results discussed above gain added context when a content analysis is performed. Using the 75 per cent positive response format (Figure 19) the distributions of questionnaire items are as follows:

A) Tuttle-Marcy-Pratt-Free-Audubon (47)

Kids:
- sass (1)
- go to gym (2)
- go to band (3)
- write (5)
- paint (8)
- do reading (9)
- have fun (10)
- sit (11)
- have lunch (15)
- play four square (17)
- play games (18)
- sometimes be quiet (23)
- get mad at the teachers (24)
- have free time (26)
- play (29)
- spell (30)
- bitch at other kids (31)
- do art (32)
- play kickball (33)
- goof off (35)
- go to the bathroom (37)
- run (42)
- write stories (43)
- have "groups" (48)
- talk (50)

Teachers:
- teach science (54)
- watch (55)
- help kids to learn (57)
- talk to the other teachers (60)
- read (61)
- work (62)
- go outside (63)
- drink coffee (66)

Teachers (continued):	teach (67) have meetings (68) break up fights (69) write (70)
Principals:	give orders to kids (76) check up on things (78) talk (81) do business (84) have meetings (86) fill out forms (87) talk to kids in the office (88) make rules (91) make phone calls (94) drink coffee (96)
Comments:	This list generally represents things which could be expected in most public schools. A few items (e.g., "go to band") may be found in some schools but not others, depending upon available resource personnel or other factors. A few others may be subject to fads, such as four square and kickball; he majority, however, are related to the socially expected roles of student, teacher and/or principal.

B) Tuttle-Marcy-Pratt-Free (9)

Kids:	go to woodworking (9) have tables (12) hit (16) build things (27) watch video tapes (44)
Teachers:	play games with students (56) take kids places (59) teach you new math games (65) get their jollies (75)
Comments:	These items, characteristic of the SEA schools, but not the comparison site, appear to relate primarily to enrichment activities and environments found in SEA. For example, woodworking and "build things" relate to the fact that each SEA elementary school has a wood shop. Tables are more ubiquitous in the alternatives than in the desk-oriented control school. Teaching new math games may be related to resource availability, but also ties to the more flexible teaching styles of alternatives.

C) Tuttle-Marcy-Pratt-Audubon (11)

Kids:	go to the library (22) do science (39) do social studies (47)
Teachers:	take students to the principal (51)
Principals:	have aide meetings (77) keep order (80) come in the classroom to talk to the kids (85) check the rooms (90) lead the school (93) keep things going (97) OK (approve) things (98)
Comments:	This set, exclusive of Free School, appears to reflect if anything the Free School's conspicuous absence. The perceived deficiencies in kids going to the library, doing science, teachers taking kids to the principal, the principal keeping order, etc., probably all relate to the somewhat demoralized atmosphere which existed during the Free School's fourth year. When the survey was taken, the principal of the Free School was on his way out and serious rifts existed within the staff and parent communities, with much concomitant disillusion among students.

D) Tuttle-Marcy-Free-Audubon (1)

Kids:	play baseball (21)
Comment:	Pratt school has a small concrete playground with no softball diamond.

E) Tuttle-Marcy-Pratt (5)

Kids:	plant things (20) teach each other (40)
Teachers:	read books to you (52) help you to learn about this school (73)
Principals:	work with kids (83)
Comment:	This set, exclusive of Free School and Audubon, again reflects enrichment activities partially fostered by alternatives teaching and the resources of SEA.

F) Tuttle-Marcy-Free (1)

Kids: play volleyball (38)

Comment: This may relate to differing physical education curricula.

G) Tuttle-Pratt-Free (2)

Kids: listen most of the time (25)

Principals: bawl people out (79)

Comment: Subjective differences in student affect.

H) Tuttle-Pratt-Audubon (2)

Teachers: sit at their desks (53)

Principals: suspend kids (95)

Comment: Probably related to more 'traditional' role relationships of teachers and principals.

I) Tuttle-Free-Audubon (1)

Kids: get bored (14)

Comment: Subjective affective response.

J) Tuttle-Free (3)

Kids: go to the store (4)
have to put up with a bonehead (45)

Teachers: get tired of working from dawn till dusk (71)

Comment: Probably different basis for response. Tuttle students do not go to the store during school hours; Free School students might. Similarly, the affective basis for working conditions at Tuttle and Free are probably quite different.

K) Tuttle-Audubon (1)

Teachers: walk kids to gym

Comment: A 'traditional' order maintenance role.

L) Marcy-Pratt (1)

Kids: wreck things

Comment: Probably a differential objective response.

M) Marcy-Free (2)

Kids: type
make kites

Comment: Represents probably more flexible curricula at these two schools.

N) Free-Audubon (1)

Teachers: bitch

Comment: Probably differing reasons for these shared perceptions; the Free School response may relate to the staff rift (see C above). Perceived complaining by teachers may relate simply to order maintenance at Audubon.

O) Marcy (1)

Kids: have math bees

Comment: Curricular differences.

P) Pratt (2)

Kids: go to photo lab

Principal: goes swimming with kids

Comments: Tuttle also has a photo lab, but it is not used by all classes. Free School has a photo lab; use not clear. The Pratt principal apparently goes swimming with students.

Q) Free School (4)

Kids: go in the lounge and smoke

Teachers: act bossy
teach people to make hammocks

Principal:	sits in the office and talks on the telephone all day
Comments:	First item: the Free School has older students (K-12) which may account for the smoking; also the more permissive atmosphere may allow this. Item 3: apparently students make hammocks at Free School (curricular differences); Items 2 and 4 relate to the affective atmosphere in the Free School (see comments above).

J. Conclusions

The Comparative School Culture segment of this working paper has produced two major conclusions: (1) schools are more similar than they are different; and (2) genuine differences in cultural content exist between the SEA schools, and between them and non-SEA schools. The Free School is the most radically different of the four SEA schools. In relation to the research questions above, we find that there are 'universals' in school culture, but that there are a number of traits that characterize SEA schools from non-SEA schools, including a variety of enrichment factors in curriculum and teaching styles. Administrative roles appear most closely parallel between SEA schools and the comparison school, and most different in the Free School. However, the Audubon principal was formerly an SEA school principal. The affect of this on the similarity in student perceptions is unclear from this research, as he had been at Audubon less than a year, probably insufficient time to have remodeled the school in the image of an SEA alternative.

APPENDICES

APPENDIX A

CLASSROOM OBSERVATION FORM

TIME		SPACE	ACTIVITIES	GROUPING				ADULTS	ACTIVITY INFORMATION
Start	End			Alone	Paired	Grouped	Single Group		

APPENDIX B

CONTEMPORARY SCHOOL DATA

APPENDIX B I

WEEKLY SCHEDULE OF CLASS OBSERVED
CONTEMPORARY SCHOOL

Time Blocks	Monday	Tuesday	Wednesday	Thursday	Friday
1	8:45-9:00 Attendance News Plans	8:45-9:00 Attendance News Plans	8:45-9:00 Attendance News Plans	8:45-9:00	8:45-9:00
2	9:00-9:30 Language	9:00-9:30 Language	9:00-9:30 Language	9:00-9:30 Language	9:00-9:30 Language
3	9:30-10:20 Social Studies	9:30-10:20 Social Studies	9:30-10:20 Social Studies	9:30-10:20 Social Studies	9:30-10:20 Social Studies
4	10:20-10:35 Recess	10:20-10:35 Recess	10:20-10:35 Recess	10:20-10:35 Recess	10:20-10:35 Recess
5	10:35-11:30 Reading	10:35-11:30 Reading	10:35-11:30 Reading	10:35-11:30 Reading	10:35-11:30 Reading
6	11:30-12:00 Gym	11:30-12:00 Gym	11:30-12:00 Gym	11:30-12:00 Gym	11:30-12:00 Gym
7	12:00-12:15 Prep for lunch	12:00-12:15 Prep for lunch	12:00-12:15 Prep for lunch	12:00-12:15 Prep for lunch	12:00-12:15 Prep for lunch
8	12:15-12:45 Lunch	12:15-12:45 Lunch	12:15-12:45 Lunch	12:15-12:45 Lunch	12:15-12:45 Lunch
9	12:45-1:00 Story	12:45-1:30 Story	12:45-1:00 Story	12:45-1:00 Story	12:45-1:00 Story
10	1:00-1:45 Math		1:00-1:45 Math	1:00-1:45 Math	1:00-1:45 Math
11	1:45-2:00 Recess		1:45-2:00 Recess	1:45-2:00 Recess	1:45-2:00 Recess
12	2:00-3:00 Science		2:00-3:00 Science	2:00-3:00 Science	2:00-3:00 Science

APPENDIX B II

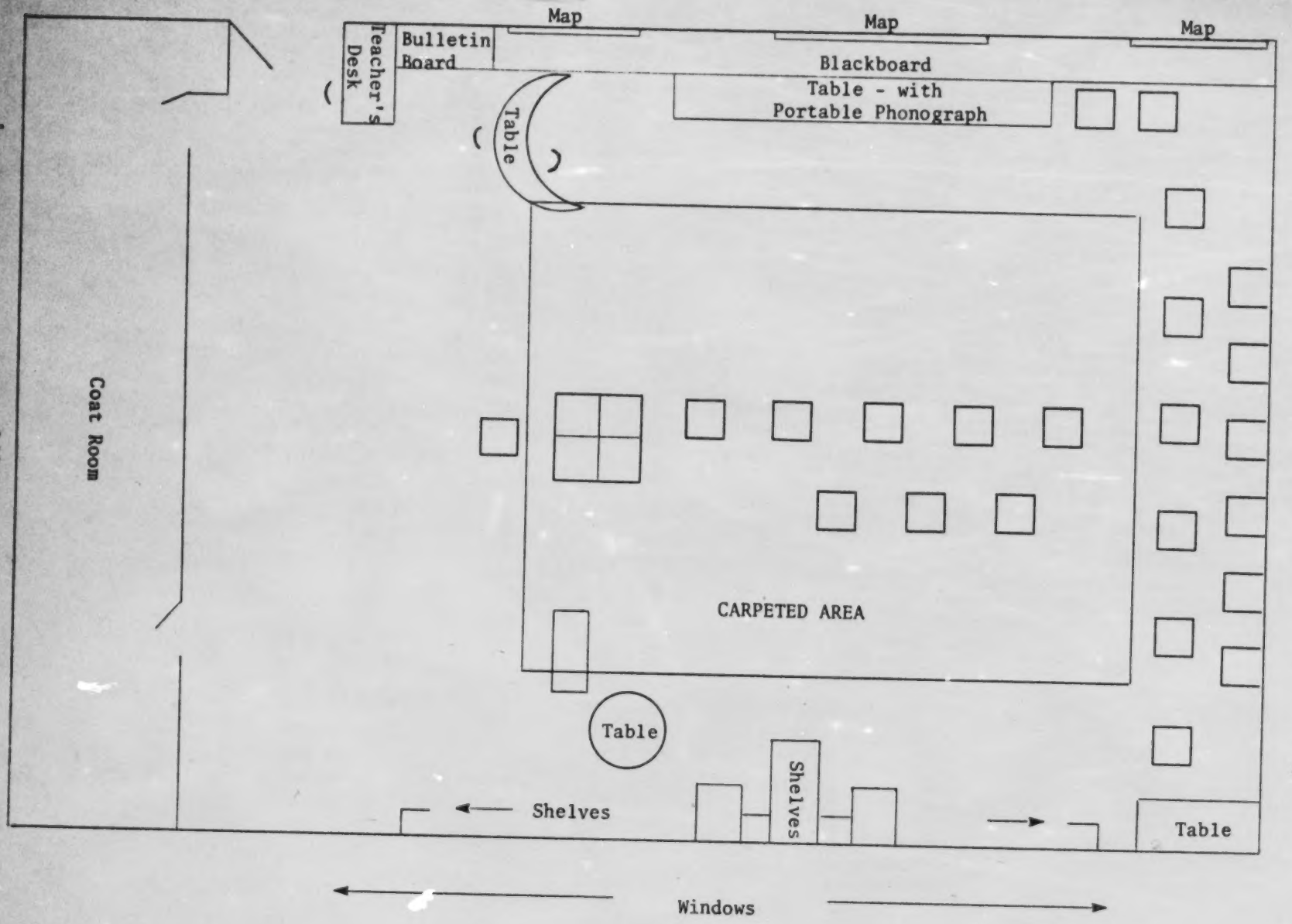
PERIODS OF TIME OBSERVED
CONTEMPORARY SCHOOL

	Monday	Tuesday	Wednesday	Thursday	Friday	
First Week Observed			10:00-11:30 12:45- 3:00		10:15-12:10	
Second Week Observed				8:50- 9:35 9:55-10:45 11:00-11:30 12:00-12:20 1:00- 1:55		
Total Hours			3 hrs.45 mn.	3 hrs.20 mn.	1 hr.55 mn.	9 hrs.

Session No.	Observation Sessions Time	Breakdown by Class and School Routines Time	Minute Total	Routine
(1)	10:00-11:30	10:00-10:20	20	Class
		10:20-10:35	15	School
		10:35-11:30	55	Class
	12:45- 3:00	12:45-12:50	5	School
		12:50- 1:40	50	Class
		1:40- 2:00	20	School
		2:00- 3:00	60	Class
(2)	10:15-12:10	10:15-10:40	25	Class
		10:40-10:55	15	School
		10:55-12:10	75	Class
(3)	8:50- 9:35	8:50- 9:35	45	Class
	9:55-10:45	9:55-10:45	50	Class
	11:00-11:30	11:00-11:30	30	Class
	12:00-12:20	12:00-12:15	15	Class
		12:15-12:20	5	School
	1:00- 1:55	1:00- 1:45	45	Class
		1:45- 1:55	10	School

APPENDIX B III

MAP OF CLASSROOM OBSERVED
CONTEMPORARY SCHOOL



151 ☐ = Student Desk

APPENDIX B IV

SELECTIONS FROM MATERIALS USED
IN ACTIVITIES OBSERVED

Tuttle Contemporary School
Mathematics

FORM 8-3

1. $3\overline{)36}$

a. 15
b. 12
c. 13
d. 9
e. 14

2. 100 x 5 = _

a. 15
b. 5
c. 50
d. 500
e. 0

3. 30 x 20 = □

a. 600
b. 500
c. 650
d. 550
e. 505

4.
$$\begin{array}{r} 673 \\ \times\ 5 \\ \hline \end{array}$$

a. 3,065
b. 3,365
c. 3,156
d. 3,265
e. 3,060

5. 8 x 20 = _

a. 16
b. 160
c. 100
d. 28
e. 12

6. $2\overline{)846}$

a. 400
b. 423
c. 432
d. 324
e. 4

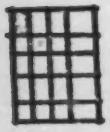
7. Estimate to the nearest 100.

$$\begin{array}{r} 4671 \\ \times\ 348 \\ \hline \end{array}$$

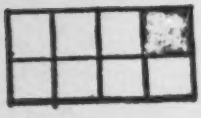
a. 1,141,000
b. 1,441,000
c. 1,410,000
d. 1,144,000
e. 1,140,000

8. Which shaded region represents $\frac{1}{4}$?

a.

b. 

c.

d. 

e.

9. $\square \times 8 = 480$

a. 20
b. 40
c. 60
d. 30
e. 80

10. $100 \times 10 = \_\_$

a. 0
b. 1
c. 10
d. 100
e. 1000

11. $64 \div 4 = \_\_$

a. 100
b. 92
c. 16
d. 96
e. 384

12. Round 14 off to the nearest 10.

a. 10
b. 15
c. 20
d. 40
e. 0

13. Find the missing numbers..

8 x 517 = 8 (__+__+__)=

8 (500) + 8 (10) + 8 (7)

a. 8 + 500 + 10
b. 500 + 10 + 7
c. 500 + 100 + 700
d. 5 + 1 + 7
e. 8 + 517 + 0

14. In the division problem

30 ÷ 6 = 5, 6 is the ___.

a. divisor
b. dividend
c. quotient
d. remainder
e. product

15. 60 x 40 = □

a. 400
b. 4200
c. 1000
d. 2400
e. 4800

16. 30
x7

a. 210
b. 21
c. 37
d. 33
e. 2100

17. 827
x 4

a. 3,208
b. 3,301
c. 3,308
d. 3,108
e. 3,201

18. Name the fraction that is represented by the shaded part of the rectangle.

a. 1/12
b. 1/3
c. 1/4
d. 1/6
e. 12

19. $\square \times 5 = 450$

a. 60
b. 80
c. 70
d. 90
e. 50

20. Estimate to the nearest 10.

$$\begin{array}{r} 4987 \\ -\ 1498 \\ \hline \end{array}$$

a. 3490
b. 3499
c. 3949
d. 1498
e. 3509

DATA MASTER 9b

Learning Yanomamo

CULTURES

ENGLISH	YANOMAMO	PRONUNCIATION
head	bei ka ha	bay kuh hay ("bay" as in "tray"; "kuh" as in "cut"; "hay" as in "tray")
tooth	bei ka nako	bay kuh naa-kuh ("naa" as in "not")
eye	bei ka mamo	bay kuh mamo ("mamo" as in "mom" plus "o" as in "no")
nose	bei ka hushibo	bay kuh who-she-buh
arm	bei ka bojo	bay kuh bow-koh
human being	Yanomamo	yah-no-ma-muh
armadillo	obo	oh-boh (or oh-bow)
jaguar	ora	oo-rah ("oo" as in "glue")
rat	torobo	toe-row-bow
dog	hiima	he-e-muh ("he" as in "tree")
paper (leaf)	bei ka hena	bay kuh he-nuh
to draw	onimao	oh-knee-my
something to be used	dimo	dee-muh
pencil	onimodimo	oh-knee-mo-dee-muh
picture	noreshi	no-re-she ("re" as in "sled")
us (all of us)	bamako	bah-muh-kuh
us (the two of us)	bahako	bah-huh-kuh
you (plural)	wamako	wah-muh-kuh
you (singular)	wa	wah
at, on, toward, or in the direction of	hamo	hah-muh
to go	huu	who-uuh ("uuh" rhymes with "who")

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Learning Yanomamo

PHRASES AND SENTENCES

1. using a pencil:

onimodimono
onimo = to decorate a surface
dimo = something to be used for
-no = agency of, by means of

2. Let us draw a picture of a rat on our paper, using a pencil.

Onimodimono, bel ka hena hamo torobo noreshi bamako onimao

Onimodimono	= By means of a pencil	oh-knee-mo-des-muh-nuh
bei ka hena	= paper, leaf	bah kuh he-nuh
hamo	= on	hah-muh
torobo	= rat	toe-row-bow
noreshi	= picture	no-re-she
bamako	= all of us	bah-muh-kuh
onimao	= draw	oh-knee-my

3. Let us draw a picture of a human being on our paper.

Bei ka hena hamo, Yanomamo noreshi bamako onimao.

4. This afternoon we will go down the river to hunt.

Wayade daha, koro hamo bahako rama huu.

Wayade	= In the afternoon	wah-yah-day
daha	= at the time of	dah-huh
koro	= downstream	koh-row
hamo	= in the direction of	hah-muh
bahako	= the two of us	bah-huh-kuh
rama	= to go hunting	rah-mah
huu	= to go	who-uuh

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APPENDIX C

CONTINUOUS PROGRESS SCHOOL DATA

APPENDIX C I

WEEKLY SCHEDULE OF CLASS OBSERVED
CONTINUOUS PROGRESS SCHOOL

Time Blocks	Monday	Tuesday	Wednesday	Thursday	Friday
1	9:15-10:45 Heartland	9:15-9:30 Circle	9:15-9:30 Circle	9:15-9:30 Sentence Dictation	9:15-9:30 Circle
2	10:45-11:30 Interest Groups	9:30-10:00 Music	9:30-10:00 Word Building	9:45-10:30 External Evaluation Testing	9:30-10:00 Sentence Dictation
3	11:30-12:10 Social Studies	10:00-10:30 Sentence Dict. Practical Math	10:00-10:15 Sentence Dictation	10:30-10:45 Breakfast	10:00-10:45 Fire Prevention
4	12:10-1:00 Lunch/Recess	10:30-10:45 Breakfast	10:15-10:30 Free Time (Finish Projects)	10:45-11:30 Interest Groups	10:45-11:30 Interest Groups
5	1:00-1:30 Math	10:45-11:00 Recess	10:30-10:45 Breakfast	11:30-12:10 Social Studies	11:30-12:10 Castle Time
6	1:30-2:00 Gym	11:00-11:20 Handwriting	10:45-11:30 Interest Groups	12:10-1:00 Lunch/Recess	12:10-1:00 Lunch/Recess
7	2:00-2:45 Study Hall & Math	11:20-12:10 Social Studies (Guest Speaker)	11:30-12:10 Castle Time or Free Time	1:00-2:00 Social Studies (Guest Speaker)	1:00-1:30 Math
8	2:45-3:30 Reading	12:10-1:00 Lunch/Recess	12:10-1:00 Lunch/Recess	2:00-2:30 Math	1:30-2:00 Gym
9		1:00-1:30 Math	1:00-1:30 Math	2:30-2:45 Feelings	2:00-2:45 Social Studies
10		1:30-2:00 Movie	1:30-2:00 Gym	2:45-3:00 Recess	2:45-3:25 Reading
11			2:00-3:00 Art (Guest Speakers)	3:00-3:25 Study Hall	
12			3:00-3:20 Free Choice & Math		

APPENDIX C II

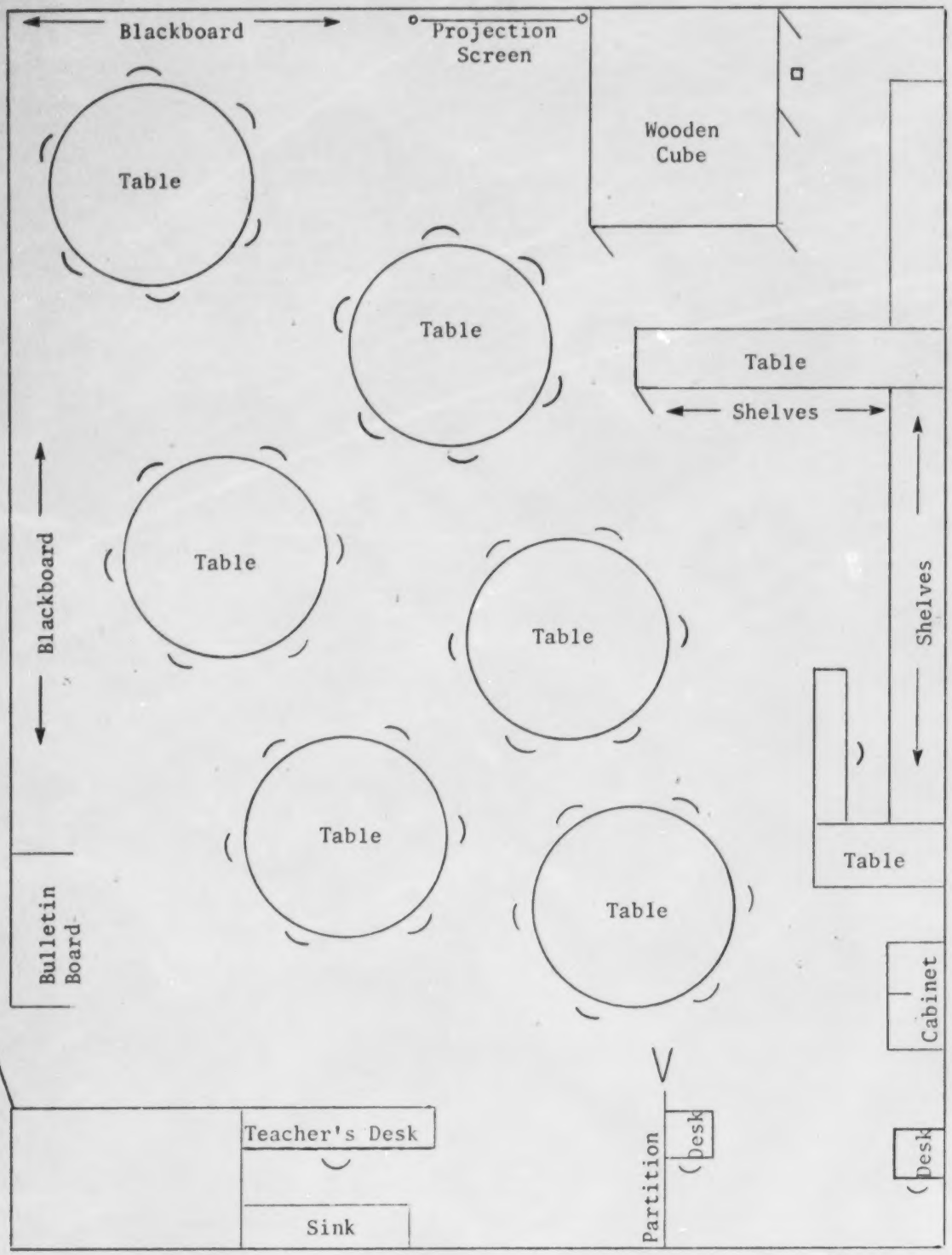
PERIODS OF TIME OBSERVED
CONTINUOUS PROGRESS SCHOOL

	Monday	Tuesday	Wednesday	Thursday	Friday	
First Week Observed		10:10-11:10	10:45-11:45 1:25- 3:25	10:20-2:55		
Second Week Observed			9:10- 9:35			
Total Hours		1 hr.	3 hrs.25 mn.	4 hrs.35mn.		9 hrs.

Session No.	Observation Sessions Time	Breakdown by Class and School Routines Time	Minute Total	Routine
(1)	10:10-11:10	10:10-10:55	45	Class
		10:55-11:10	15	School
(2)	10:45-11:45	10:45-11:45	60	Class
	1:25- 3:25	1:25- 3:25	120	Class
(3)	10:20- 2:55	10:20-12:05	105	Class
		12:05- 1:00	55	School
		1:00- 2:55	115	Class
(4)	9:10- 9:35	9:10- 9:35	25	Class

APPENDIX C III

MAP OF CLASSROOM OBSERVED
CONTINUOUS PROGRESS SCHOOL



APPENDIX C IV

SELECTED MATERIALS USED IN ACTIVITIES
OBSERVED
CONTINUOUS PROGRESS SCHOOL

Name _____

Did Clarissa take the dare? ____
Why do you think she chose
to go along with the dare? ____

Why do you think she chose
to be safe? _____

How do you think the gang
would feel after her decision? ____

What is group pressure? _____

When is it desirable? _____

What is the difference between
being dared by others and
being dared by oneself _____

APPENDIX D

OPEN SCHOOL DATA

APPENDIX D I

WEEKLY SCHEDULE OF CLASS OBSERVED
OPEN SCHOOL

Time Blocks	Monday	Tuesday	Wednesday	Thursday	Friday
1	8:45-9:15 Circle	8:45-9:15 Circle	8:45-9:45 Teacher Prep	8:45-9:15 Circle	8:45-9:45 Teacher Prep
2	9:15-10:10 Project Time	9:15-10:10 Project Time	9:45-10:10 Project Time	9:45-10:10 Project Time	9:45-10:10 Project Time
3	10:10-10:30 Recess	10:10-10:30 Recess	10:10-10:30 Recess	10:10-10:30 Recess	10:10-10:30 Recess
4	10:30-11:45 Project Time	10:30-11:45 Project Time	10:30-11:45 Project Time	10:30-11:45 Project Time	10:30-11:45 Project Time
5	11:45-12:00 Clean-up	11:45-12:00 Clean-up	11:45-12:00 Clean-up	11:45-12:00 Clean-up	11:45-12:00 Clean-up
6	12:00-12:40 Lunch	12:00-12:40 Lunch	12:00-12:40 Lunch	12:00-12:40 Lunch	12:00-12:40 Lunch
7	12:40-1:15 Circle	12:40-1:30 Circle	12:40-1:15 Circle	12:40-1:15 Circle	12:40-1:15 Circle
8	1:15-3:00 Quiet Time		1:15-3:00 Quiet Time	1:15-3:00 Quiet Time	1:15-3:00 Quite Time

APPENDIX D II

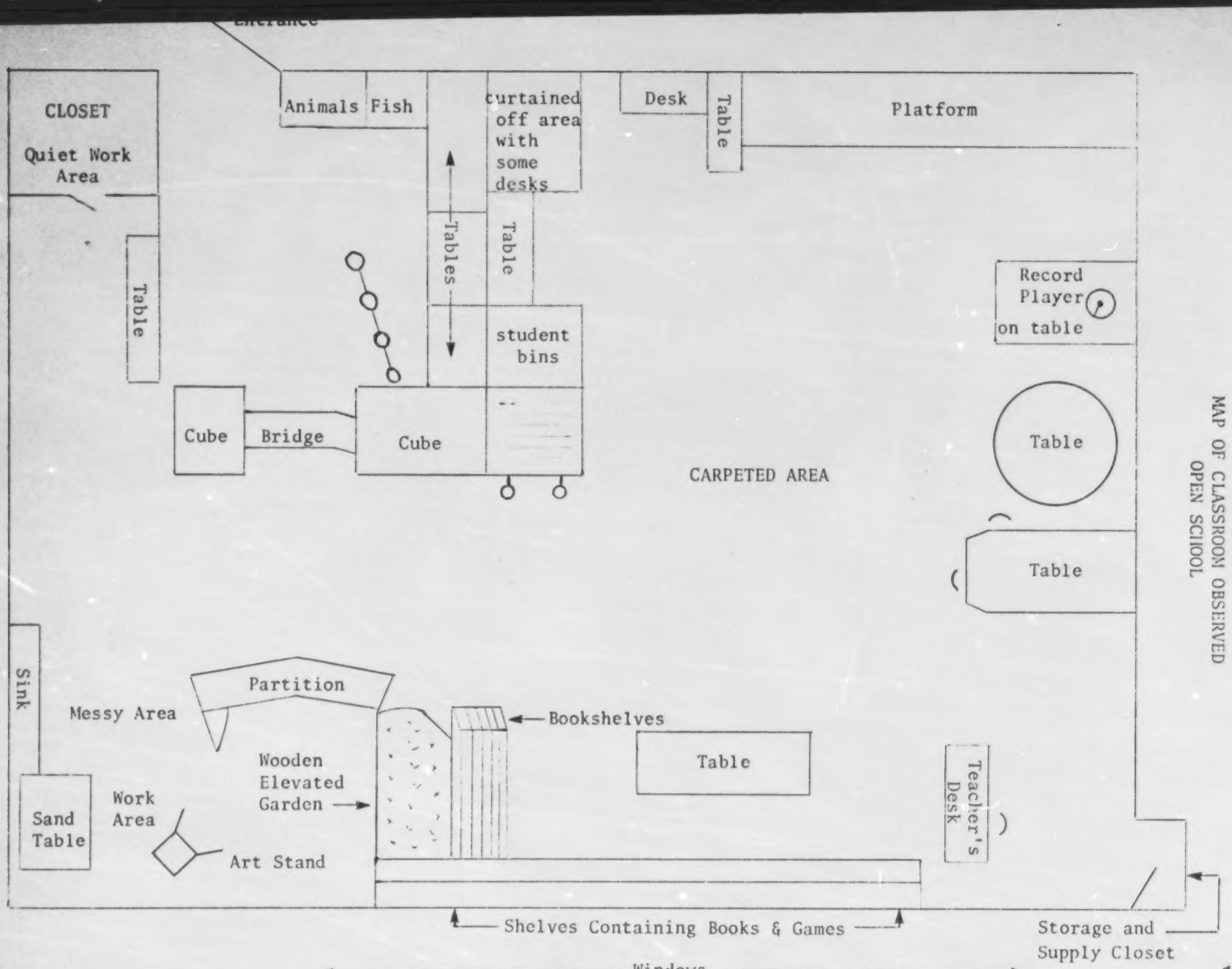
PERIODS OF TIME OBSERVED
OPEN SCHOOL

	Monday	Tuesday	Wednesday	Thursday	Friday	
First Week Observed		11:15-12:15	10:30-12:00 12:10-12:45 1:15- 2:30	8:45-11:45 12:45- 2:15		
Second Week Observed		8:45-9:45				
Total Hours		1 hr.10 mn.	3 hrs.20 mn.	4 hrs.30 mn.		9 hrs.

Session No.	Observation Session Time	Breakdown by Class and School Routines Time	Minute Total	Routine
(1)	11:15-12:15	11:15-12:00	45	Class
		12:00-12:15	15	School
(2)	10:30-12:00	10:30-12:00	90	Class
	12:10-12:45	12:10-12:45	35	School
	1:15- 2:30	1:15- 2:30	75	Class
(3)	8:45-11:45	8:45-10:10	85	Class
		10:10-10:30	20	School
		10:30-11:45	75	Class
	12:45- 2:15	12:45- 2:15	90	Class
(4)	8:45- 9:45	8:45- 9:45	10	Class

APPENDIX D III

MAP OF CLASSROOM OBSERVED
OPEN SCHOOL



FIRE AND BRIMSTONE COMPNY

A D.M. CRAB ENTERPRIZE

Previous (last) employment: _____

How long? _____

Employer _____

Name _____ Age _____

Address _____ City _____

SECTION I

Police record:

a. Have you ever been arrested? _____

b. Why? _____

(use reverse side to continue)

c. Kid - have you rehabilitated yourself? _____

How? _____

(use reverse side to continue your ridiculous story)

SECTION II

Public Service: (use the reverse side to tell all the great things you have done)

a. Military? _____

(continue on reverse side)

b. Church? _____

(ditto)

c. Social? _____

(volunteer, school or other... continue on flip side)

CONTRACT

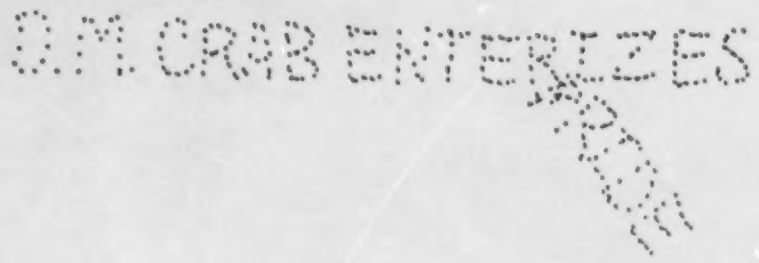
I swear that all of my answers have been true—

Signed _____.

DATE _____.

DO NOT WRITE IN THIS SPACE ↷

EVALUATION: (By employer)



To the Employee:

I accept the position _____.

I cannot accept the position _____.

Why? _____.

I will correct the situation _____.

How? _____.

(use reverse side for more talk)

X _____

(your sign place) (our sign place)

_____

170 (Date)

Form X-1-17-75-C8

SUPER JOB APPLICATION / continued

(Fire And Brimstone Company)

"if we make it, you can burn it. . . or else!"

HEALTH: (use reverse side to talk about germs, etc.)

SECTION III

a. Have you missed school or job due to sickness in the last two years? _____

b. List illness _____

c. Is there physical work you cannot do? _____ (yes - no)

What? _____

Why? _____

d. Can you work outside? _____

HOBBIES:

SECTION IV

Please list any special interests you have or do. (explain on flip side.)

Music _____ Crafts _____

Art _____ Theatre _____

Plants _____ Any Other _____

APPLICATION: (explain all answers on reverse side)

SECTION V

a. What work would you like to do?

b. When would you be available?

c. Why should you be hired?

d. Education?

We sure want to hire you, but REMEMBER —

"DON'T CALL US - WE'LL CALL YOU"

DM Graf
Enterp

AJAX THE DORZONIAN

Nº 7

161

AJAX FOUND HE HAD TRANSPORTED HIMSELF INTO A CAVE 1

MEANWHILE, ON THE 'COMPASS'.... 2

3

4

5

BACK ON THE PLANET, CALLED VOID. 6

7

8

9

10

last Week's Top 30

by Ethan Adams WBIC

•=No Good |••=OK. •••=Good ••••=Great •••••=Dynamite

30. "Stand by me"/ John Lennon•

29. "How Long"/Ace•••••

28. "I don't like to sleep alone" Paul Anka•

27. "My eyes adored you"/ Frankie Valli•

26. "Killer Queen"/ Queen•••••

25. "Bertha Butt Boogie"/ Jimmy Castor Bunch•••

24. "It's a miracle"/ Barry Mantaloe••

23. "He don't Love you like I love you"/Tony Orlando-Dawn••

22. "Satan Sole"/ Love Unlimited Orchestra•••

21. "Jackie Blue"/ Ozark Mountain Daredevils•••

20. "Long Tall Glasses"/ Leo Shere•••

19. "Have you never been mellow?" Olivia Newton John••

18. "You Are so Beutiful"/ Joe Cocker••

17. "Shining Star"/ Earth, Wind and Fire•

16. "L-O-V-E"/ Al Green• 174 162

15. "Walking in RyThym"/ Blackbirds•

14. "Before the next Teardrop Falls" Freddy Fender•

13. "Harry Truman"/ Chicago•••••

12. "Supernatural Thing"/ Benny King•

11. "Emma"/ Hot Choclate•••••

10. "Once you get started"/ Rufus•••••

9. "What am I gonna do with you"/ Barry White••

8. "Chevy Van"/ Sammy Johns•••

7. "Lady Marmelade"/ Labelle•••

6. "Another Somebody done Somebody wrong song" B.J. Thomas••

5. "Poetry Man"/ Pheeby Snow•

4. "Express"/ B.T. Express•••••

3. "No, No Song"/ Ringo Starr•••

2. "Lovin' You"/ Minnie Riperton•••

1. "Philadelphia Freedom"/ Elton John Band•••••

Jay's vs Trudie's Kickball

- Last Friday Jay's and Trudie's had a Kickball game. The Blue Jay's won 5 to 3 a pretty close game, it was the last inn- it was tied up 3-3 But Jay's SCORED 2 more runs in the 6th inning to win 5 to 3

By Chris Brunetti

100% chance of rain. Snow tonight thru Tomorrow.
Hi today - 50's
Lo tonite - 35
tomorrows high - 50's

Stanley Cup Playoffs 1975

Make your choices Greg Krugur and Lonnie Anderson our passing out sheets the winner gets 1$.

- 8th Street Journal
  34-6 pages — sold weekly
- Editors: Chris B. Frank K.
  Sports: Geoff B.
  Top 30: Ethan Adams
- Reporters: Chris S. Chris B. Frank K.
  Comic's: Chris S.
- Weather: Andre Delattre

Free School

the 8th JOURNAL STREET

ISSUE 7 3¢
APR. 1975

LEGHOLD TRAPS

206 HELPS IN FIGHT

by Liesl Harvat

206 asks Marcy: Why should you care about animal traps?

- Because the leghold trap is very common
- Because the leghold trap makes animals suffer
- Because the trappers don't check their traps for days and days
- Because all kinds of animals are caught—not just the good fur ones.

a leghold trap

What can you do?

- Sign the big paper near 206 to let us know you care. We'll let everyone on the list know when the hearing on making it against the law to use the leghold trap come up at the State Capitol.
- Also- read our signs and ask for more information if you want it (from 206).
- read 'Dear Melissa' on page 4

GLEN

Editor's note: 'Glen' is a new weekly column. Glen was interveiwed about school happenings.

There is a All-School Meeting this Monday. The concerns will be the large number of kids wanting to come to Marcy next year and the fact that next year we will not get as much federal money for community resource projects. These things will be talked about at the meeting.

There was a Principals Conference in Mpls. on Wednesday. Principals From across the country came here. About 13 visited Marcy. They really liked it. Parents of 5-year olds are visiting Marcy next Wed.

Glen thanks everyone for the birthday cards he received.

FUN PAGE

this page is devoted to Student's Contributions. Please, We need YOUR work! Bring your poem, puzzle or drawing to the 204 closet.

last week's answers

Brain Busters

1. Not on either side! Survivors aren't buried!
2. Not on either side! Roosters don't lay eggs! Hens do!

Twins Quiz

1. Soderholm
2. Darwin
3. Carew
4. Oliva

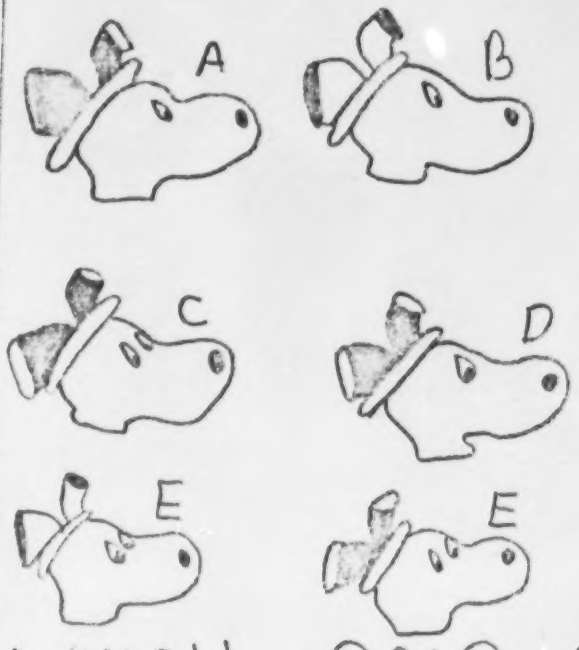
PI SQUARE

by Charlie Amundson

Using the shapes below, make 2 perfect squares.

Rules.

1. Cut the shapes out.
2. You CAN turn the peices over.
3. Don't get too frustrated



WHICH PAIR IS ALIKE? by Chris Steller

Dear Mellisa

Editors note: Due to popular demand we are returning this column to print. Please bring your questions or problems to the 204 closet.

Dear Mellisa:

I am 10 years old and am at the average 10 year old reading level. I want some more books to read but I can't find any I like. Can you name a few good ones?

Bookworm

Dear Bookworm:

Sure, Here the are:

- Deenie
- Mom, the Wolfman and Me
- Are you there, God? Its me, Margaret!
- Isabelle the Itch

I hope you like them!

Melissa

the top 30 rock charts! Page 5!

Tomorrow Marilyn is selling

Popcorn Balls!

15¢

a peice and they are great and delicious!

WBIG A all-new ROCK radio station if you have a CB receiver or a walkie-talkie you can listen.

4:00 P.M. mondays
3:00 P.M. tuesdays

Knock Hockey Tournement

This is a tournement sponsered by Trudie's room. There is a sign up sheet on the stairway between the first and second floors, if you want to enter. Knock Hockey is a game in box. It is played like real hockey. The only difference is there is a block in front of the goal

APPENDIX E

FREE SCHOOL DATA

APPENDIX E I

SAMPLE OF GENERAL SCHOOL SCHEDULE - THIRD TRI-SEMESTER
FREE SCHOOL

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:15- 9:45	Older Gym-Dagney Games-Carolyn Open Science-Epperly	Advisee Groups Carolyn Tom Steve Jim E. McCarthy	Older Gym-Dagney Games-Carolyn Open Science-Epperly	Older Gym-Dagney Storytelling-Carolyn Fieldtrip-Jim O.D.	Older Gym-Dagney Storytelling-Carolyn Open Science-Epperly
9:45- 10:30	Biology-203 Open Science proj. Epps. Reading & Writing O.D. & Engdahl Math - Rich Finance-Carolyn	Reading & Writing-Odendahl & Engdahl Goe-rings Straw sculptures-Carolyn	Reading & Writing-Engdahl & Odendahl Finance-Carolyn Biology-203 Open Science Projects-Epperly Math-Rich	Geo-rings-Carolyn Fieldtrip-Jim Reading & Writing-Engdahl & Odendahl Math- Rich	Geo-rings-Carolyn Biology-203 Open Science Projects-Jim Math-Rich Group/Jim McCarthy
10:30- 11:15	y.Mid. Gym-Dagney Cultures-Odend. Math-Rich Wooden sculptures-Carolyn Open Science-Jim E.	Cultures-Odend. Food-Carolyn Younger Middle gym-Dagney	Cultures-Tom O. Food-Carolyn Math-Rich Younger M. Gym-Dagney Open Science-Jim	Fieldtrip-Jim E. Tom O. Wooden Sculptures-Carolyn Math-Rich Cultures-Tom D. Y.M. Gym-Dagney	Wooden Sculp-Carolyn Open Science-Jim E. Cultures-Tom O Y.M. Gym-Dagney Math-Rich
11:15- 12:00	Lunch open gym dreams arrange with Wayne	Lunch open gym	Lunch open gym	Lunch	Lunch open gym
12:00- 12:45	Shop Art Spanish-O.D. Band Gymnastics-Wayne (3 wks only)	Shop Art Spanish-O.D. Band Gymnastics-Wayne	Art Shop Gymnastics-Wayne Photography-see Carol Pottery	Art Shop Spanish-Arr. Band Gymnastics-Wayne Photography-Pottery	Art Spanish-Arr. Band Gymnastics-Wayne
12:45- 1:45	Women's Band (1:00-2:00) Shop Pottery Group/ Jim McCarthy	Women's Band (1:00-2:00) Gym-Open Advanced Science Shop Art	Shop Art Pottery Group/Jim McCarthy Photography-see Carol	Shop Art Women's Band (1:00-2:00) Photography-see Carol	Art Women's Band (1:00-2:00) Pottery
1:45- 2:30	Airplanes-O.D. Anatomy, Health & Nutrition-Jim Flute-Morrie (2:00-3:00) Great Classics-Carolyn Middle Math	MIDDLE MASTER SCHEDULE	Airplanes-O.D. Anatomy,Health & Nutrition-Jim Great Classics-Carolyn	Auto-Mechanics-Epperly (2:30-3:30) Flute-Morrie Games-Carolyn Middle Math	Airplanes-Odendahl Great Classics Carolyn Anatomy,Health & Nutrition-Jim Flute-Morrie (2:30-3:30)
2:30- 3:30	Plant ... rolyn Open ... ence Projects-Epp. Open Gym-Tom O. Guitar-Morrie Music-Morrie Hammocks-Wayne	FORM A17-86 4439210 M-3c REVISED	Open Science Projects-Jim Movies-Tom O. Hammocks-Wayne	Auto-Mechanics-Epperly Detectives-Carolyn Open Gym-Tom O. Guitar-Morrie Music-Morrie Hammocks-Wayne	Open Sci.Proj. Epperly Science Movies Detectives-Carolyn Open Gym-Odend. Guitar-Morrie Music-Morrie Hammocks-Wayne

APPENDIX E I

WEEKLY SCHEDULE OF "CLASS" OBSERVED
FREE SCHOOL

Time Blocks	Monday	Tuesday	Wednesday	Thursday	Friday
1 9:15-9:45	Gym	Advise	Gym	Gym	Gym
2 9:45-10:30	Science or Math	Reading Writing by Myself and	Math	Field Trip	Math
3 10:30-11:15		Leona's Room	Science	Field Trip	Science
4 11:15-12:00	Lunch	Lunch	Lunch	Lunch	Lunch
5 12:00-12:45	Shop	Shop	Shop	Shop	Art
6 12:45-1:45	Band 1:00-2:00	Band 1:00-2:00	Shop or Art or Pottery	Band 1:00-2:00	Band 1:00-2:00
7 1:45-2:30	Anatomy Health & Nutrition	Middle Schedule Blank Form A-37C 665980A	Anatomy Health & Nutrition	Math	Anatomy Health & Nutrition
8 2:30-3:30	Guitar	M-6D	Movies	Guitar	Guitar

APPENDIX E II

PERIODS OF TIME OBSERVED
FREE SCHOOL

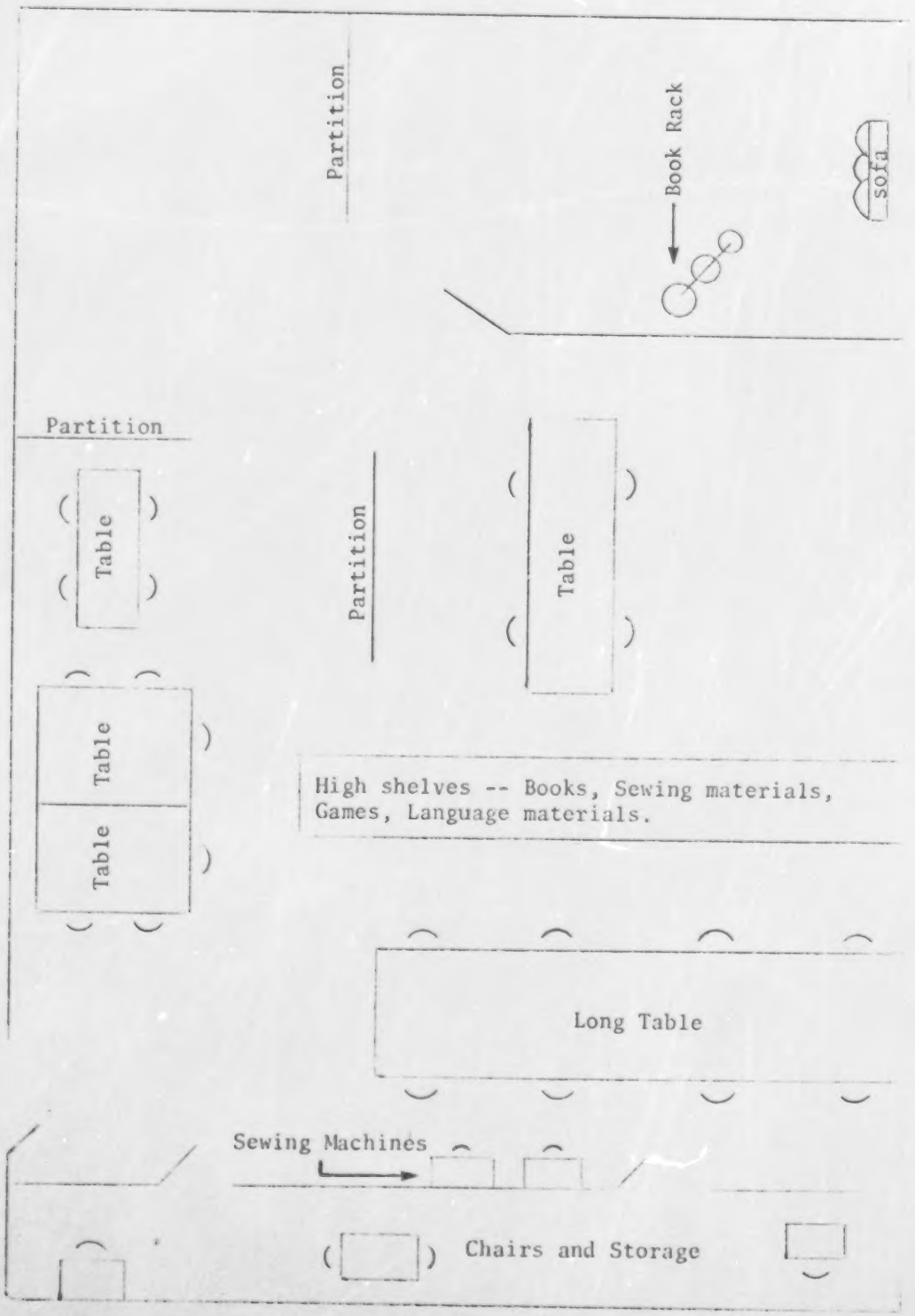
	Monday	Tuesday	Wednesday	Thursday	Friday	
First Week Observed			9:40-12:10			
Second Week Observed		10:10-11:00	9:45- 1:50			
Third Week Observed	9:30-11:05					
Total Hours	1 hr.35 mn.	50 mn.	6 hrs.35 mn.			9 hrs.

Session No.	Observation Sessions Time	Breakdown by Class and School Routines Time	Minute Total	Routine
(1)	9:40-12:10	9:40-11:10	90	Class
		11:10-12:10	60	School
(2)	10:10-11:00	10:10-11:00	50	Class
(3)	9:45- 1:50	9:45- 1:15	90	Class
		11:15-11:25	10	School
		11:25- 1:50	145	Class
(4)	9:30-11:05	9:30-10:30	60	Class
		10:30-11:05	35	Class

APPENDIX E III

MAP OF "CLASSROOM" OBSERVED
FREE SCHOOL

- THE "BARBER SHOP" -



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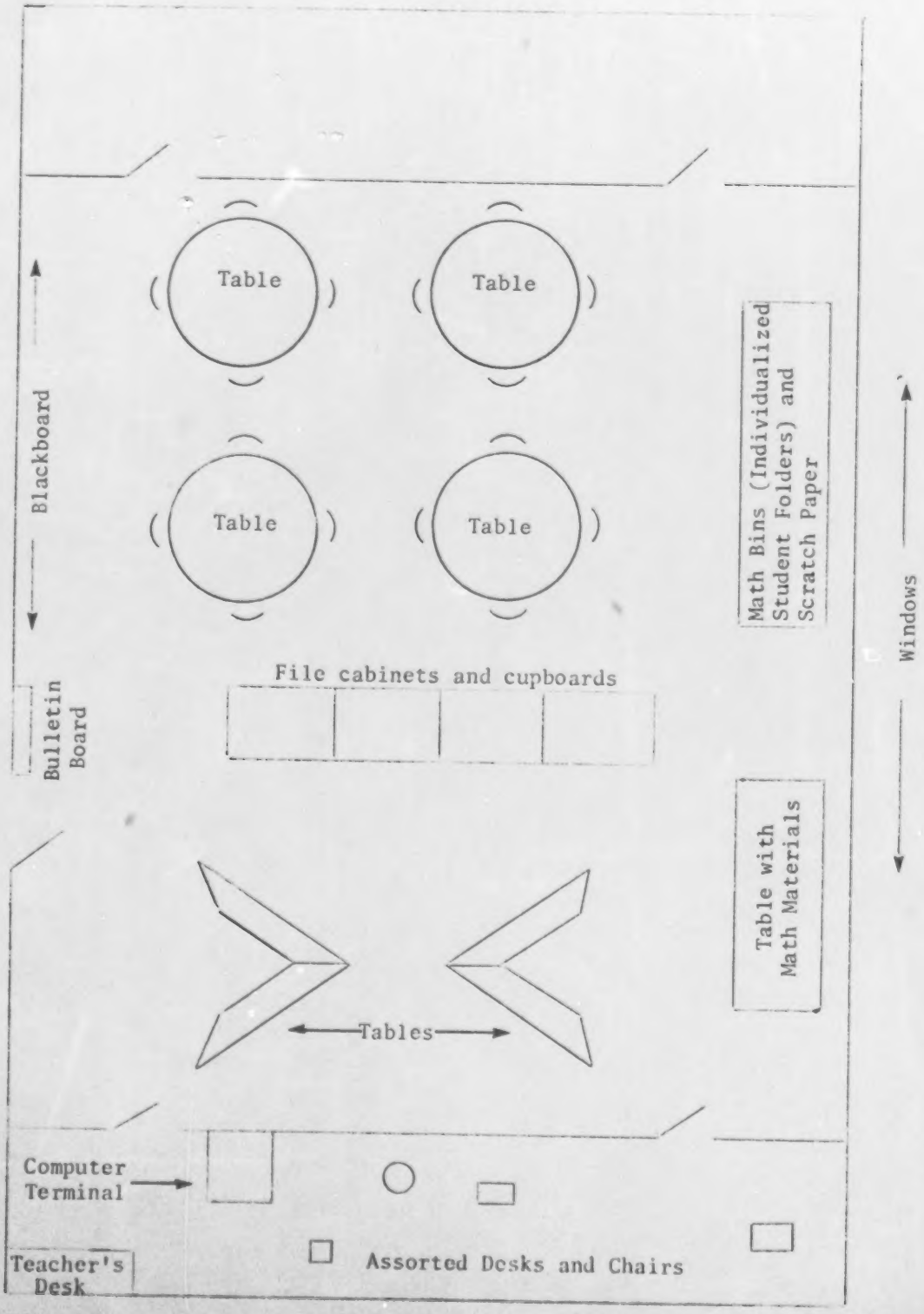
APPENDIX E III

MAP OF "CLASSROOM" OBSERVED
FREE SCHOOL

- MATH ROOM -



APPENDIX E IV

SELECTIONS FROM MATERIALS USED
IN ACTIVITIES OBSERVED

FREE SCHOOL

U P S X G O I O E N R O D L P S I X P L
L A P S S B S F L O W E R A R P Q S T D
A R P Q S X Q M O I C A R N A T I O N P
X J I K I A I S Y L C X B O K I M N Q
S B H M O N S R O V W Y C F G J I H G X
W L O Q R B P I U T H E W F L O T U S Z
A O I V E Y H S R P D E D A S O S A H S
P S G L Q X Q M N O B C A X L M W L A P
E S E D A U W V U P S A P T F T Q E M X
S O F D E C E E D P Q C O S N P O R R Y
X M C Y B A S T F Y M N R U W E T V O H
P R P V L H G F G K I U V A C B R D C I
S S A C I X Y J R S T V I O I E T E K J
P M L C K S U N F I O W E R L F U K S V
R N O A G Y W M T V U N P S O Q I R T U
Q P J H A S X O R C N I D W Y S I K L M
X B K I E D C Y I J F J I T H G P X O R
M W W X Z P L G A R D E N N Q P S T U V

Daisy, Lotus, Bouquet,
Flower, iris, yucca,
Rose, carnation, orchid,
Poppy, tulip, GoldenROD,
Violet, SunFlower Blossom,
Shamrock, Heather,
Lilac, Lily.

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173

3-'74, '74-'75,...?

APPENDIX E IV

SELECTIONS FROM MATERIALS USED
IN ACTIVITIES OBSERVED
FREE SCHOOL

MATH GRADUATION REQUIREMENTS

WHOLE NUMBER OPERATIONS

A. ADDITION ☐
B. SUBTRACTION ☐
C. MULTIPLICATION ☐
D. DIVISION (EITHER FRACTION OR DEC. REMAINDERS) ☐

FRACTION OPERATIONS

A. ADDITION ☐
B. SUBTRACTION ☐
C. MULTIPLICATION ☐
D. DIVISION ☐
E. SIMPLIFYING (REDUCING) ☐

DECIMALS - OPERATIONS

A. ADDITION ☐
B. SUBTRACTION ☐
C. MULTIPLICATION ☐
D. DIVISION ☐
E. CONVERSION - DECIMALS ⇔ FRACTIONS ☐

CHECKING ACCOUNT

A. FILL OUT A CHECK ☐
B. FILL OUT A DEPOSIT TICKET ☐
C. BALANCE A CHECKBOOK ☐

SQUARES AND SQUARE ROOTS

A. SQUARES ☐
B. SQUARE ROOTS ☐

MEASUREMENT

A. LINEAR - FEET, INCHES, YARDS ☐
B. VOLUME - GALLONS, QUARTS, PINTS, CUPS - OZ. OF EACH ☐
C. WEIGHT - POUNDS, TONS - OZ. ☐
D. MONEY - INCLUDING OPERATIONS ☐
E. TIME - CLOCK, DAY, WEEK, MONTH, YEAR ☐
F. METRIC - LINEAR, WEIGHT, VOLUME - GIVEN TABLES ☐
G. TEMPERATURE - °F & °C ☐

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7 BASIC GEOMETRIC CONCEPTS

DRAW:

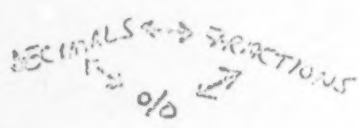
A. HORIZONTAL LINES ☐
B. VERTICAL LINES ☐
C. A POINT ☐
D. PARALLEL LINES ☐
E. PERPENDICULAR LINES ☐
F. INTERSECTING LINES ☐
G. RECTANGLE, SQUARE, TRIANGLE AND CIRCLE ☐
H. FIND THE LENGTH OF THE UNKNOWN SIDE OF A RIGHT TRIANGLE USING THE PYTHAGOREAN THEOREM ☐

RATIO – PROPORTION

A. SET UP A PROPORTION TO SOLVE A PROBLEM ☐
B. SOLVE (FOR THE UNKNOWN) A SET UP PROPORTION ☐

PER CENT

A. CONVERT:



☐

B. FIND n % OF A GIVEN NUMBER ☐
C. X IS WHAT % OF Y? ☐

SYMMETRY

A. LINE SYMMETRY
DOES A GIVEN FIGURE HAVE LINE SYMMETRY? ☐
GIVEN A FIGURE DRAW _____ LINES OF SYMMETRY. ☐

B. POINT SYMMETRY
DOES A GIVEN FIGURE HAVE POINT SYMMETRY? ☐
GIVEN A FIGURE FIND THE SMALLEST ANGLE THROUGH WHICH IT CAN BE TURNED TO COINCIDE WITH ITS ORIGINAL POSITION. ☐

PERIMETER

A. FIND THE PERIMETER OF ANY MADE FIGURE HAVING SIDES WHICH ARE LINE SEGMENTS (GIVEN DISTANCES) ☐
B. FIND THE PERIMETER OF A CIRCLE (CIRCUMFERENCE) GIVEN THE RADIUS. ☐

AREA

A. FIND THE AREA OF A PLANE FIGURE HAVING CONSISTENT WIDTH (EX.: SQUARE, RECTANGLE), A TRAPEZOID, A TRIANGLE, AND A FIGURE MADE UP OF THESE. ☐

B. FIND THE AREA OF A CIRCLE (GIVEN THE RADIUS) ☐

VOLUME

A. FIND THE VOLUME OF A RECTANGULAR SOLID (GIVEN LENGTHS OF SIDES) ☐

B. GIVEN DISTANCES AND FORMULAS FIND THE VOLUME OF A PRISM, SPHERE, CYLINDER OR CONE. ☐

ANGLES

A. MEASURE (USING A PROTRACTOR) AN ANGLE (DIRECTED ANGLE) ☐

B. CONSTRUCT A GIVEN DIRECTED ANGLE. ☐

C. KNOW THE SUM OF THE ANGLES CONTAINED IN A SQUARE, RECTANGLE, TRIANGLE AND CIRCLE. ☐

D. VERTICAL ANGLES
DRAW VERTICAL ANGLES ☐
IDENTIFY TWO VERTICAL ANGLES ☐

E. COMPLIMENTARY AND SUPPLEMENTARY ANGLES, GIVEN THE DEGREE OF AN ANGLE, NAME ITS COMPLEMENT OR SUPPLEMENT, AND THEN DRAW THEM. ☐

SIMILAR TRIANGLES

A. IDENTIFY TWO TRIANGLES AS EITHER BEING SIMILAR OR NOT SIMILAR. ☐

B. GIVEN TWO SIMILAR TRIANGLES AND THE LENGTHS OF ALL THE SIDES EXCEPT FOR ONE, FIND THE LENGTH OF THE UNKNOWN SIDE. ☐

C. APPLY THIS IN FINDING THE HEIGHT OF A TREE (OR OTHER OBJECT) BY (1.) THE SIGHTING METHOD AND (2.) THE SHADOW METHOD. ☐

MAPS

FIND THE LINEAR DISTANCE IN MILES BETWEEN ANY TWO POINTS ON A ROAD MAP (LOCATING, MEASURING WITH A RULER, AND CONVERTING TO MILES USING THE SCALE. ☐

STATISTICS

A. ORGANIZE DATA INTO A FREQUENCY DISTRIBUTION OR TABLE ☐

B. FIND THE MEAN, MODE AND MEDIAN OF A SET OF NUMBERS. ☐

C. LINE AND BAR GRAPHS

INTERPRET AND ANSWER QUESTIONS ABOUT EITHER TYPE OF STATISTICAL GRAPH. ☐

FROM DATA DRAW A LINE OR BAR GRAPH. ☐

D SAMPLING

TO UNDERSTAND SAMPLING IN REPRESENTING A LARGER GROUP. ☐

APPLICATIONS

A. INTEREST

LOANS ☐

SAVINGS ☐

B. SALES TAX ☐

C. SAVINGS ACCOUNT ☐

D. COMPARITIVE PRICING ☐

E. ELECTRIC AND GAS METERS ☐

F. CHARGE ACCOUNTS - CREDIT CARDS ☐

G. INCOME TAX ☐

H. CAR INSURANCE ☐

I. GAS MILEAGE ☐

APPENDIX F

CONCORDANCE OF SELECTED ACTIVITIES AND INSTRUCTIONAL APPROACHED OBSERVED ACROSS FOUR SEA CLASSROOMS

ACTIVITIES	INSTRUCTIONAL APPROACHES			
	CONTEMPORARY SCHOOL	CONTINUOUS PROGRESS SCHOOL	OPEN SCHOOL	FREE SCHOOL
Providing for "Basic Skills" Learning (e.g., Language Arts, Social Studies, Science, Math).	• Classroom lessons in Math, Reading, Social Studies, etc., taught primarily by homeroom teacher. • Use of separate Math and Science Centers by students.	• Classroom lessons in Math, Reading, Social Studies, etc., taught primarily by homeroom teacher. • Heavy use of separate Math and Reading Centers by students.	• Classroom "quiet time" projects stressing basic skills. Other projects. Homeroom teacher functioning heavily as guide and resource person, along with other adults in the room. • Use of a Centralized Language and Math Data Bank for instructional resources by teachers and students.	• Individual projects involving basic skills. • Use of Math, Science, and other Centers by students. • Signing up for various courses/activities.
Providing for Additional Interests Within the Building.	• Use of separate centers (e.g., Pottery, Woodworking). • Use of SEA-wide resource specialists (e.g., Creative Movement). • Use of Community School. • Use of community resources (e.g., volunteers). • Some use of classroom projects.	• Use of separate centers (e.g., Pottery, Woodworking). • Use of Interest Groups. • Use of community resources (e.g., volunteers). • Some use of classroom projects.	• Heavy use of classroom projects. • Heavy use of separate centers (e.g., Pottery, Woodworking). • Heavy use of community resources (e.g., voluntcers).	• Heavy use of individual projects. • Use of centers (e.g., Pottery, Woodworking). • Heavy use of community resources (e.g., volunteers).
Providing for Additional Interests Beyond the Building.	• Some field trips.	• Some field trips.	• Use of Community Day and Other People/Other Places Programs. • Use of field trips.	• Heavy use of field trips.

APPENDIX G

TEACHERS STUDY
INTERVIEW SCHEDULE

1. About your educational background--When did you go to college? Major?

   Probe: Native of Minnesota - Minneapolis?

2. What is your teaching background?

   Probe: SE. Pre-SEA?
   Non-SEA?
   Alternative elsewhere?

3. Why did you stay on - or become a member of SEA teaching staff?

   Probe: Time in SE?
   Limited positions available - job market?
   Want to teach in alternative?
   Familiar staff, building, community?

4. Were you prepared either before or by SEA to teach your alternative?

   Probe: Taught in alternative previously?
   Pre-inservice training?
   Learning by doing?
   Directed to literature? What?

5. Are there differences in teaching in non-alternative and alternative settings? What are they?

   Probe: Number of options for kids?
   Interaction with other adults?
   How choice is made?
   How time is allocated?
   Climate of the classroom?

6. Describe any change you've noted in the interaction of staff at your school as an alternative?

   Probe: More? Less?
   Staff friendlier, more open, able to evaluate and support one another?

7. What have been the changes in demands on your time?

   Probe: Student-centered?
   Staff-centered?
   Parent-centered?
   Administration-centered?

8. What have been the changes in the administration's expectations of you?

   Probe: Management of support staff-aides, etc.?
   Governance participation?
   Liaison with community?
   Greater decision-making?

9. Has there been a change in your contact with parents?

   Probe: More? Less? Why? How?
   Better understanding of where student is coming from?
   Improved affect of student/teacher relationship?

10. What have been the minus factors of you personally in teaching in your alternative?

    Probe: Time?
    Fatigue?
    Demands on creativity?

11. What have been the plus factor for you personally in teaching in your alternative?

    Probe: Autonomy to be creative?
    Increased attention to personal affect?

APPENDIX H

COMPARATIVE SCHOOL CULTURE QUESTIONNAIRE

Items 1-50: At your school do kids:

		YES	NO
1.	sass?	( )	( )
2.	go to gym?	( )	( )
3.	go to band?	( )	( )
4.	go to the store?	( )	( )
5.	write?	( )	( )
6.	go to photo lab?	( )	( )
7.	go to woodworking?	( )	( )
8.	paint?	( )	( )
9.	do reading?	( )	( )
10.	have fun?	( )	( )
11.	sit?	( )	( )
12.	have tables?	( )	( )
13.	have math bees?	( )	( )
14.	get bored?	( )	( )
15.	eat lunch?	( )	( )
16.	hit?	( )	( )
17.	play four square?	( )	( )
18.	play games?	( )	( )
19.	do math once a year?	( )	( )
20.	plant things?	( )	( )
21.	play baseball?	( )	( )
22.	go to the library?	( )	( )
23.	sometimes be quiet?	( )	( )
24.	get m[illegible] at the teachers?	( )	( )
25.	listen most of the time?	( )	( )

Age _____ Grade _____

Boy _____ Girl _____ 181 Teacher _____

Items 51-75: At your school do teachers:

		YES	NO
51.	take students to the principal?	( )	( )
52.	read books to you?	( )	( )
53.	sit at their desks?	( )	( )
54.	teach science?	( )	( )
55.	watch?	( )	( )
56.	play games with students?	( )	( )
57.	help you to learn?	( )	( )
58.	act bossy?	( )	( )
59.	take kids places?	( )	( )
60.	talk to the other teachers?	( )	( )
61.	read?	( )	( )
62.	work?	( )	( )
63.	go outside?	( )	( )
64.	teach people to make hammocks?	( )	( )
65.	teach you new math games?	( )	( )
66.	drink coffee?	( )	( )
67.	teach?	( )	( )
68.	have meetings?	( )	( )
69.	break up fights?	( )	( )
70.	write?	( )	( )
71.	get tired of working from dawn til dusk?	( )	( )
72.	walk kids to gym?	( )	( )
73.	help you to learn about this school?	( )	( )
74.	bitch?	( )	( )
75.	get their jollies?	( )	( )

REFERENCES

Aldrich, Ruth Ann, and Bounds, M. 1973. Marc Open School: 1972-1973 Documentation. Minneapolis Public Schools: SEA Internal Evaluation Team.

Bussis, Anne M., and Chittenden, Edward A. 1970. Analysis of an Approach to Open Education. Princeton, N.J.: Educational Testing Service.

Bohannan, Paul. 1963. Social Anthropology. New York: Holt, Rinehart & Winston.

Dreeben, Robert. 1973. The school as a workplace. In: Travers, Robert M. W. (Ed.), Second Handbook of Research on Teaching. Chicago: Rand McNally & Co., pp.457-71.

Eggan, Fred. 1954. Social anthropology and the method of controlled comparison. American Anthropologist 56:743-63.

Eggan, Fred (Ed.). 1955. Social Anthropology of North American Tribes. Englarged ed. Chicago: University of Chicago Press.

Epstein, Joyce L., and McPartland, James M. 1975. The Effects of Open School Organization on Student Outcomes. The Johns Hopkins University: Center for Social Organization of Schools. Report submitted to the National Institute of Education pursuant to Contract No. NE-C-00-3-0114.

Flament, Claude. 1963. Applications of Graph Theory to Group Structure. Englewood Cliffs, N.J.: Prentice-Hall.

French, L. Ronald. 1974. Demographic Description of Southeast Minneapolis. Report submitted to the National Institute of Education, Experimental Schools Program, pursuant to Contract No. OEC-0-71-4752.

French, L. Ronald, and Reynolds, Judy. 1975. Pratt-Motley: An Ethnography of a Continuous Progress Alternative. Report submitted to the National Institute of Education, Experimental Schools Program, pursuant to Contract No. OEC-0-71-4752.

Giannotta, Frank J. 1975. Marcy—A Social Mobilization for Educational Change: An Ethnography of an Alternative Open School. Report submitted to the National Institute of Education, Experimental Schools Program, pursuant to Contract No. OEC-0-71-4752.

Goodenough, Ward H. 1956. Componential analysis and the study of meaning. Language 32(2):195-216.

Goodenough, Ward H. 1971. Culture, Language and Society. McCaleb Module in Anthropology No. 7. Reading, Mass.: Addison-Wesley.

Haugen, Einar. 1957. The semantics of Icelandic orientation. Word 13:447-60.

Jackson, Philip W. 1968. Life in Classrooms. New York: Holt, Rinehart & Winston.

Lortie, Dan C. 1973. Observations on teaching as work. In: Travers, Robert M. W. (Ed.), Second Handbook of Research on Teaching. Chicago: Rand McNally & Co., pp.474-97.

Lortie, Dan C. 1975. Schoolteacher. Chicago: University of Chicago Press.

McNeil, John D. 1969. Forces influencing the curriculum. Review of Educational Research 39(3):293-318.

Minneapolis Advisory Task Force on Alternatives. 1974. Report to the Board of Education, April 1974.

Moore, Frank (Ed.). 1961. Readings in Cross-Cultural Methodology. New Haven: Human Relations Area Files.

Morgan, Lewis Henry. 1871. Systems of Consanguinity and Affinity of the Human Family. In: Smithsonian Contributions to Knowledge, 17.

Murdock, George Peter. 1949. Social Structure. New York: MacMillan Co.

Nadel, S. F. 1951. The Foundations of Social Anthropology. Glencoe, Ill.: Free Press of Glencoe.

Nelson, Hal E. 1975. Tuttle School: An Ethnography of a 'Contemporary' Elementary Alternative. Report submitted to the National Institute of Education, Experimental Schools Program, pursuant to Contract No. OEC-0-71-4752.

Nelson, Hal E., and Giannotta, Frank J. 1974. Research Methodology in Alternative Education Settings. Report submitted to the National Institute of Education, Experimental Schools Program, pursuant to Contract No. OEC-0-71-4752.

Nelson, Hal E., et al. 1975. Southeast Alternative Schools Ethnographic Studies: Executive Summary. Draft report submitted to the National Institute of Education, Experimental Schools Program, pursuant to Contract No. OEC-0-71-4752.

Olson, Ruth Ann (Aldrich). 1974. Marcy Open School: 1973-1974 Goal Evaluation. Minneapolis Public Schools: SEA Internal Evaluation Team.

Olson, Ruth Ann (Aldrich), and Patton, Karen. 1975. Marcy Open School: 1974-1975 Goal Evaluation Supplement. Minneapolis Public Schools: SEA Internal Evaluation Team.

Patton, Karen. 1975. Evaluation of the Southeast Alternatives Community Volunteer Program. Minneapolis Public Schools: SEA Internal Evaluation Team.

Patton, Karen. 1975. Marcy Open School: Community Day Evaluation. Minneapolis Public Schools: SEA Internal Evaluation Team.

Pelto, Pertti. 1970. Anthropological Research: The Structure of Inquiry. New York: Harper & Row.

Radcliffe-Brown, A. R. 1958. Introduction. In: Strinivas, M. N. (Ed.), Method in Social Anthropology. Chicago: University of Chicago Press.

Reeves, Pat (Korges). 1975. Southeast Free School: Fourth Year Report. Minneapolis Public Schools: SEA Internal Evaluation Team.

Rogers, Carl R. 1961. On Becoming a Person. Boston: Houghton Mifflin Co.

Smith, Lou M., and Keith, Pat M. 1971. Anatomy of Educational Innovation: An Organizational Analysis of an Elementary School. New York: John Wiley & Sons.

Smith, Lou M., and Geoffrey, William. 1968. The Complexities of an Urban Classroom: An Analysis Toward a General Theory of Teaching. New York: John Wiley & Sons.

Tyler, Stephen A. 1969. Cognitive Anthropology. New York: Holt, Rinehart & Winston.

Tylor, Edward B. 1889. On a method of investigating the development of institutions. Journal of the Royal Anthropological Institute 18:245-72.

Wallace, Anthony F. C. 1961. Culture and Personality. New York: Random House.

Wallace, Anthony F. C. 1975. The problem of the psychological validity of componential analyses. American Anthropologist 67(5) Part 2; Formal Semantic Analysis (Special Publication edited by E. A. Hammel) 229-48.

Watson, James B. (Ed.). 1972-75. Anthropological Studies in the Eastern Highlands of New Guinea (Series Title). Seattle: University of Washington Press.

Whiting, J. W. M., and Child, I. L. 1953. Child Training and Personality. New Haven: Yale University Press.